TRENDS IN EDUCATION

1977

2 Summer Issue

Gifted Children

European Schools

Assessment

Art Education

Book Reviews

Department of Education and Science

HMSO 50p net Annual subscription £2·44 including postage

Trends in Education

SUMMER 1977

Contents

Talking Points 2

Gifted children 4

An education for the musically gifted
A. K. Quilter 4

Teaching mathematics to gifted children
A. Ashbrook 9

The education of children gifted in the visual arts
Ernest Goodman 14

Children with exceptional ability
Joan Dean 18

Gifted primary children in Redbridge
Barbara Taylor 23

The European schools 26

Schola Europea ex foedere novem nationum
D. T. E. Marjoram and R. C. Williams 26

The European School, Uccle, Brussels
Michael Farrar and Henry Christian 30

Trends in assessment: a Scottish contribution to the debate
P. M. Broadfoot 35

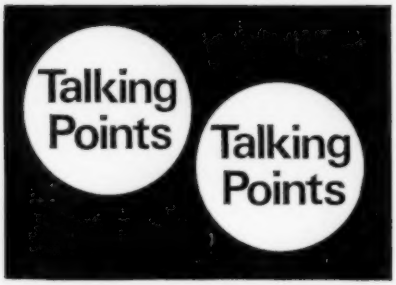
Art education in the primary school: the need for new approaches
John A. Willsdon 39

Book Reviews 43

The opinions expressed in Trends in Education are those of the writers and do not necessarily reflect the views of the Department of Education and Science. Contributions (2,000 words maximum) should be addressed to the Executive Editor.

Editorial Board: Senior members of the DES and HMI.
Editor in Chief: Jennifer Price.
Executive Editor: Iain Paterson.
HMI Editorial Adviser: Miss K. M. P. Burton.

Editorial Office: Room 2/11 Elizabeth House, York Road, London SE1 7PH.
Enquiries concerning subscriptions should be addressed to HMSO, PO Box 569, London SE1 9NH.



Broadcasting in a vacuum?

Educationists of every kind should find the Annan Report on the future of broadcasting* interesting reading. Since its publication in March, it has been analysed, dissected, and, like the curate's egg, pronounced good in parts – though the various commentators don't seem able to agree on exactly which are the good bits and which the bad.

One thing is clear, however. The Report brings together within its 522 pages – good value for £7·25, even if it is in paperback – a great deal of impressive evidence from an enormous number of concerned individuals about what broadcasting has done, what it is doing, and what more it can be expected to do.

But there is one piece of evidence that is particularly important simply because of what it does *not* say.

In 1975–76, according to the Report, the BBC's schools, further education, and Open University production departments each produced approximately 300 television and 300 radio programmes. Almost all the schools output came accompanied by printed literature and more than 60 per cent of further education series on radio and more than 25 per cent on television also had supporting literature of some kind. In addition to all that, the twenty BBC local radio stations produced about 400 different series, some of them accompanied by printed literature. Excluding these local radio productions, the BBC's schools programmes cost £3·2 million in 1974–75, and further education programmes £2·9 million. The Open University paid the BBC £2·9 million to produce and transmit the University's radio and TV broadcasts.

ITV does rather less. Nevertheless, all its school programmes went out with accompanying notes for teachers, and some had material for pupils. Just over half the adult education programmes had supporting literature. The cost of all this in 1974–75 was about £1·5 million for the pre-school and school broadcasts and about £1 million for adult education.

Educational broadcasting, then, is not cheap and it is not going to get any cheaper. It has expanded enormously over the years, particularly in the late '60s and in the '70s, when education itself was expanding. The Committee was told by many educationists, and by others, that a further expansion is now necessary. Broadcasting, it was suggested, has 'only just begun to scratch the surface of the educational needs which ought to be met in the future', and this, it was said, is particularly true of post-school education.

But any such expansion cannot go on indefinitely because, for one thing, there just isn't enough air-time. There is, however, another – more subtle – constraint, raised by Lord Vaizey and the Standing Conference on Broadcasting. They pointed out that there is very little validated evidence that educational broadcasting is effective. The broadcasters themselves told the Committee that they were convinced of its effectiveness. But, then, they would, wouldn't they? They were supported in this by the gut feelings of the spokesmen for the main educational organizations. But gut feelings are not evidence, and it is strange that the BBC Audience Research Department carries out no research into the effectiveness of the Corporation's educational broadcasts. The BBC School Broadcasting Council holds firmly to its belief in 'subjective appraisals'. The Controller of BBC Educational Broadcasting suggested, rather lamely, that the programmes must be worth-

* *Report of the Committee on the Future of Broadcasting* (Chairman: Lord Annan). Cmnd 6753. HMSO: 1977.

while because so many schools used them.

In other words, educational broadcasting in this country survives on the strength of 'subjective appraisals', faith and gut feelings. The line between them must be narrow – if, indeed, it can be drawn at all.

The case for objective and consistent criteria is strong. The problem is how to set about getting them. The Report devotes a large part of one entire chapter to a discussion of the issues involved. Certainly, the programme planners must know who heard or saw the programme. Professor Himmelweit added the valuable rider that it makes little sense to include everyday viewing figures for children from 5 to 16 unless the analysis is conducted to show differences in children's viewing according to their age. The Report suggests that the audience research departments should be asked more frequently to study the audience's understanding of the topic at the time the producer is considering a programme series because he needs to know more about the people his programme is to be aimed at. Perhaps, too, some research is needed to find out how effective the programme was in increasing the audience's understanding of the topic and the issues it raised and in establishing to what extent, if any, it changed their attitudes.

One thing is certain. We cannot let the case for educational broadcasting go by default. It is no argument to say that it must be a good thing otherwise we wouldn't be doing it. The Emperor in the fable believed he was wearing his clothes because the courtiers said so. He set a bad precedent for anyone else to follow.

Gifted Children

How can we recognize a gifted child? What, in fact, *is* 'giftedness'? How does it relate to intelligence, for example?

Educationists are generally agreed that three elements – intelligence, special abilities, and creativity – have to be present, but there is still a great deal of disagreement over how independent or interdependent these elements are. The most widely used and convenient criterion is performance in one or more tests of general intelligence. An IQ of 140 is commonly accepted as being the dividing line that distinguishes the gifted from the rest of the population, but this still leaves us with the problem of identifying special abilities and creativity.

Here, as in so much else, we simply lack information, and the more information we can get from teachers and others working closely with gifted children the better. The following articles, all of which have been written by educationists of long experience in this difficult area, will, the editors hope, make a useful contribution to the debate which will be continued at the Second World Conference on the Gifted and the Talented in San Francisco this summer.

Trends 1977/2

An education for the musically gifted

A. K. QUILTER

Headmaster, Wells Cathedral School

The need to provide for the education of children specially gifted in music has gradually come to be recognized in this country. It is now clearly understood that provision cannot be left until young people have reached the age of performers' courses at *conservatoires* if those from varying social backgrounds are to be given something approaching equal opportunity. Gifts must be identified early which, for string players, means by the age of 10. A proper régime of disciplined training must be provided to allow these gifts to mature.

The mention of special aptitude in music in the 1960 Martin Report was an indication of the growing interest in the subject. This Report suggested categories of assistance with boarding education, a view reinforced by the Public Schools' Commission First Report in 1968* which proposed the setting up of academies for this purpose. The Calouste Gulbenkian Report, *Making Musicians*† and the 1970 Peacock Report, *Orchestral Resources*, for the Arts Council,‡ both reiterated the need for proper early training if instrumental musicians of international standing were to be nurtured in this country.

* Report of a Working Party on Assistance with the Cost of Boarding Education. Ministry of Education, 1968.

† *Making Musicians*. A Report to the Calouste Guebenkian Foundation, 1965.

‡ Available from the Arts Council.

The last fifteen years have seen independent initiatives at the Yehudi Menuhin School in Surrey, at Chetham's School of Music in Manchester, at Wells Cathedral School in Somerset, and at the Purcell School in London. The Inner London Education Authority has provided special courses at Pimlico Comprehensive, and the Scottish Arts Council has encouraged the work of St. Mary's Music School in Edinburgh. There is a considerable variety of provision though the total number of places will not exceed 400 for the whole 10–18 age group in all these schools.

Specialist music training

Wells Cathedral School has been developing a scheme of specialist music training for string players since 1970. The intention from the outset was to provide a small course – at first twelve, now twenty – of not more than forty boys and girls within a normal independent school of some 600 boys and girls in the 7–18 age range. The school is divided into a primary department of 150 pupils and a secondary department of approximately 450 pupils, which is run as a three-form entry 11–18 school. The ability range of the boys and girls tested on Bristol Achievement Tests ranges from a standardized score of approximately 100 to the top of the ability range – that is, from approximately the national average to the potentially ablest university entrant. The number of children of grammar school ability outweighs those who would not have achieved this standard by about 2 to 1, but there is a sprinkling of children who find academic work very difficult. The academic courses aim at GCE O-level in about eight subjects at 15 or 16, followed by a two-year course in the sixth form leading to GCE A-level in three subjects. Some ninety pupils are taking A-level courses in the sixth form and approximately half of those who leave each year go on to university, three or four of them to Oxford or Cambridge. The other half range from those who will go on to take a craft apprenticeship at 16, with no more than a handful of O-levels or CSEs, to those who will take courses of higher education at a polytechnic or college of education or who may go direct into employment between the ages of 16 and 18.

Within this setting, a specialist course has been devised for outstandingly gifted children with high aspirations.

Since the twelfth century, there has been a Cathedral School at Wells. Cathedral choristers do not start their first lesson in the morning until 10.00 am because of practice, and they have to leave games or any other activity by about 4.15 pm to be ready for further practice and daily Evensong, which finishes around 5.45 pm. Choristers may also have to miss lessons for a special service and have to stay on in the holidays to sing at major festivals. There is nothing unique in this tradition, which is shared by some thirty-four other choral foundations throughout the country. Ex-Cathedral choristers, besides going on to becoming organists or well-known figures in the musical world, have earned their living in many other occupations, from engineering to accountancy or acting. Their concentration on choral music does not appear to inhibit their

ability to perform in a variety of other spheres of ordinary achievement.

Since the early 1960s, when the role of the independent Church schools was first questioned, there has been a developing concern for the education of gifted young instrumentalists. It therefore seemed a logical step for a Cathedral school to develop a specialist instrumental scheme.

In 1970, twelve violin pupils were selected at an audition by a specially invited, independent panel, led by Allen Percival, Principal of the Guildhall School of Music and Drama. Academic tests were given but selection was based solely on musical grounds. One of those selected, in fact, had a standardized score in the low 80s. Since that time, auditions have been held annually, and through the generosity of a number of foundations, as well as the growing support of a number of education authorities, the school has been able to provide twenty places for the training of young players of the violin, viola and 'cello. A decision was taken early to concentrate upon string playing because this was recognized to be the musical skill that, more than any other, required a properly disciplined foundation at an early age. It was also the skill in shortest supply nationally.

Since that time, the school has attracted many children with a genuinely serious interest in the piano, woodwind and brass, and it has made a high level of professional provision for the teaching of these instruments in what are termed 'serious' categories of training. There are some forty 'serious' musicians at Wells. The remaining 200 children who learn an instrument merely for amateur pleasure are termed 'general' musicians. What follows describes the integration of the teaching of the twenty 'specialists' within the curriculum. Similar arrangements are offered to outstanding 'serious' pupils.

Outstanding musical gift

One of the difficulties that has to be faced is the phrase 'child of outstanding musical gift'. It suggests that we look for something special in a child, as easily identifiable as left-handedness or red hair, and then merely make special provision for this quality. Administratively, it would make life easier if things were this way, but children are just not like that. Over the years, it has proved better to think in terms of devising a course of training at the highest level to nurture those who aspire to play professionally and then to select, preferably at a very young age, those who appear to possess the aptitudes and characteristics that professional musicians of standing recognize as fundamental in their profession. Our experience has shown that the vast majority selected continue on this course. However, it is vitally important, in a culture that still values the individual for his own sake and not merely for some star quality that he can give to the country in international competition, that a child should have the opportunity to rethink his or her original commitment and, if necessary, to move into a more academic course or concentrate on some other aspect of school life. The Wells scheme, operated

within the normal curriculum, means that a young person can either choose to reconsider himself or be reconsidered at 11-plus, which would be unusual, at 14-plus before the important two-year examination course, or at 16-plus, before the sixth form. We are convinced that it is important to provide other opportunities within the same institution to minimize any trauma the child may experience in having possessed a gift that failed to come to fruition.

The curriculum for the specialists has been managed in the same way as for the choristers as over many years this has proved to be the best way of keeping choices open to the children. In the first three years of secondary education, the school is not streamed by ability in any of the three forms of the year group; it is, however, setted by ability in French and mathematics, and Latin is timetabled against some periods of a general humanities course. Choristers, specialist musicians, and serious musicians who have a major commitment to music practice are all placed in one form and the timetable for that form is constructed in such a way as to ensure that no languages, mathematics or science are taught before 10.00 am. Musicians may miss a general humanities lesson, a general music lesson or, occasionally, an English or history lesson, but they do not miss a lesson in any subject where the lack of factual knowledge would hinder their whole progress. At 14-plus they are free to practise from 8.15 am until 9.15 am, and again from 4.45 pm until 6.00 pm, but they gain their other practice periods from subjects which at this stage they have been allowed to give up on the general curriculum. This at 14-plus and 15-plus allows for English, French and mathematics in the common core, and four other subjects chosen from a total of fifteen within four option groups. Music can be taken as an extra O-level subject. This allows for nine GCE subjects. Specialists normally take six subjects including music: thus they can have at least twelve or possibly fourteen lessons free in the week for practice. In the sixth form, two A-levels would be taken by a specialist, one of which would be music; there would be some general studies but plenty of time is provided for the five hours of daily practice necessary at that age.

The scheme has from the start been conducted with help and advice from London music colleges and professional musicians. The three specialist teachers of strings are performers and teach both in London and Wells. They give their pupils hourly lessons twice a week. Yfrah Neaman, the violinist and head of the string department of the Guildhall School, is adviser to the school and visits twice a term. The National Association of Gifted Children has been a helpful ally. Through the initiative of Yehudi Menuhin there is regular contact between the schools principally involved in this work. Involvement with the world of professional playing is essential for this training.

Effect on the school

The scheme has made an enormous difference to the general music in the school, and it is benevolently accepted or even welcomed with

a certain pride by those who have no music pretensions whatsoever. It does, of course, make great demands on the pastoral and academic staff and it is essential that they are in sympathy with the whole development. Definitions of responsibility need to be very clear. What really makes the scheme possible is the fact that over half the secondary stage pupils are boarders, though a day boy or day girl would not be excluded if he or she could maintain the routine and the standard of development. The life of any boarding community is always busy and it enables both staff and the boys and girls to accept a busier day than would be envisaged in most day schools: it also means that all the aspects of a child's day can be considered within the one institution, without endless hours being spent on buses and trains travelling to teachers or concerts.

While a demanding routine has been stressed, children – thank goodness! – remain children capable of defying the best arranged systems. Ninety per cent of those who started young have continued to progress steadily, develop their enthusiastic interest in music, and manage a quiet professionalism in their busy lives. One of the first on the course has just won the Gold Medal of the Guildhall School awarded to the best instrumental performer over a period of two years. A very few who start with a gift and an apparent eager determination to submit themselves to work can later come to realize that they may be doing this more to satisfy some parental wish rather than their own inner drive. Staff need to be ready to counsel and assist with difficult decisions. Lack of progress on the course may be the result of many factors, sometimes domestic concerns, sometimes the natural reticence of a growing adolescent. Sometimes a specialist may request transfer from the main instrumental course or the change to another instrument or a concentration on composition. Only twice in seven years have teachers suggested that a specialist should be re-auditioned, and almost a year's notice was given. The presence of a large number of children of general musical competence who may lack quite the specialized drive of the dedicated performer helps to provide wide orchestral experience. The wider group help the sense of fun in music-making generally, which is so essential to the vigour of any cultural activity.

A positive advantage

In conclusion, it should be said that at Wells it has proved an advantage to have a specialist course as a small group within a larger setting with a wide range of alternative possibilities. The number of children of outstanding ability able to profit from this kind of education is, however, in national terms, very limited indeed. Selection of these children will do little to hamper the musical education of the majority of children whose welfare the State must always have in the forefront of its thinking. At the same time, a group of children who can demonstrate to their fellows the highest standards of excellence in a given field, whether through an informal evening concert, a recital in assembly, or an appearance in a major concert hall, gives life and a sense of pride to the whole community.

Music is a means of communication appreciated much more widely than merely among professional musicians. Excellence in this field will never come unless it is trained young, and it is one of the ways not only of enriching a school but also our national life. A proper means of underwriting the cost needs to be worked out at national level and not left to the varying decisions of different local authorities or private benefaction.

Trends 1977/2

Teaching mathematics to gifted children

A. ASHBROOK

HM Inspector with special responsibility for mathematics

It is often claimed that mathematical gifts are revealed at an early age, and an examination of the lives of famous mathematicians seems to indicate that the majority, though not all, appear to have shown signs of considerable mathematical ability in childhood. Some, like Gauss, were infant prodigies in calculating, but not all had this gift and not all infant calculating prodigies have developed into mathematicians. Mathematicians, like any other group of people, vary considerably, not only in revealing their talents, but in their attitudes to life and in their personal qualities. When we consider the ablest 2 per cent of the population, and not just the mathematical genius, then identification becomes even more difficult and it becomes clear that there is no one thing which typifies those who are mathematically very able.

Future potential

Future mathematical potential may be indicated when young children are able to sort and classify objects at an early age. The criteria they use may be quite sophisticated and involve careful and detailed observation: for example, toy cars will be classified not only by colour, make, or size, but by their speed down a slope. In their play, these children may also exhibit an interest in spatial relationships; they will very carefully line up their toy cars in straight lines, be very precise about the positioning of animals in pens in their toy farmyard, and make patterns and interesting structures with building bricks which reveal ideas of balance and symmetry.

If these interests outpace their manual skills and they cannot carry their ideas into practice, they may become frustrated.

Able children often show an early interest in language and in the precise meaning of words. This, if encouraged, enables them to express their ideas with increasing clarity, and the development of language takes place alongside the refinement of their mathematical ideas, each supporting the other. Adults need to be aware of language when discussing mathematics with them and to be clear and precise in the words they choose to use. Ideas of number also appear early, not merely the number games and rhymes which many children experience and enjoy, but much more precise ideas of number. Able children soon appreciate the matching of the number names one by one with a collection of objects and distinguish between this counting process and the totality of objects in the set; they have an early understanding of the ordinal and cardinal aspects of number. They may well be able to carry out simple operations with numbers before they start school and problems can arise when teachers unknowingly ask them to tread the same path as their school fellows, to manipulate simple structural apparatus, or to practise simple sums for which they see no need. In such circumstances, some children will conform to please the teacher and so appear to be no brighter than their peers, while others, becoming bored or frustrated, may resort to silent inactivity or anti-social behaviour.

The problem of how to cater appropriately for both the high fliers and for the majority of pupils continues for the teacher throughout the whole of the pupils' school life. A gifted pupil can easily become isolated from his fellows if the teacher does not handle the situation sensitively. Such a boy or girl may always provide the right answer to the teacher's question, and show great insight in their questions which are often meaningless to the rest of the class. It is all too easy in such cases for the bright child to be ridiculed by his classmates and for him to give up the attempt to excel and to retreat into passive conformity.

When a teacher gives a detailed explanation of a new technique, the exposition may appear pedestrian, if not banal, to the able pupil who may be several steps ahead of the teacher. Because he appears not to be paying attention, the teacher may ask him a question, and he will answer the question he anticipated at his own stage of thinking and not the question actually put. If this happens on several occasions and the teacher is not aware of his capabilities, he may come to regard the pupil as stupid. Giftedness, already difficult to identify, is made even more difficult to recognize by such occurrences, particularly when, because of the pressures recognition may bring, pupils choose to remain unidentified.

Ability in mathematics

Continuity of progress in mathematics is particularly important, and if pupils are to maintain their interest and momentum when they transfer to another school, detailed records need to be kept of their progress and attainment and be passed on to the receiving school.

Where this is not done, there is a danger that teachers will expect all incoming pupils to start from a common base line, and if this becomes the established practice, teachers in the contributory schools may not feel the need to provide the stimulus for pupils to achieve more than the minimum standard agreed for the time of transfer.

Spread of ability shows itself in mathematics more markedly than in many other subjects, and some secondary schools attempt to reduce this in any teaching group by introducing setting for mathematics. In highly selective schools, the top set will contain a few gifted pupils, and their number not only reduces the dangers of isolation, but enables the teacher to work with them as a group and to get them to discuss their ideas with each other and with him. Such pupils appear to enjoy the element of competition, though clearly this must not be overstressed and requires careful handling.

One of the difficult decisions for teachers is whether to give the able pupils the same course as the rest but at an accelerated pace, or whether to provide them with a course different in kind. In some schools where setting takes place and didactic teaching is the general mode, there is a temptation to keep the class together and to expect the ablest pupils merely to do more exercises of the same kind. In other schools, the top set may be given an accelerated course, take their external examination in mathematics early, and spend the extra year studying additional mathematics. This may benefit the very able pupils but it may not be entirely appropriate for every member of the set. In some schools, where mathematics is taught to mixed-ability groups, pupils work through a textbook or a series of work cards at their own pace. For the ablest, this can imply a lively pace, but frequently the teachers have little time to ask searching questions and there is little opportunity for pupils to discuss their own ideas either with the teacher or with each other. Too often, able pupils do every example in an exercise when a selected few would be more appropriate; it may be necessary to convince them that they will not be at a disadvantage if they attempt fewer routine questions than other pupils. The extreme classroom practices of, on the one hand, keeping the whole class together, and on the other, of allowing pupils to range indiscriminately through textbook exercises, can be equally harmful to the ablest.

As an alternative to an accelerated course, the teacher may ask the able pupils either to study current topics in greater depth and breadth or to explore other topics on their own. Guidance, but not detailed directives, will be needed and this can be given through the teacher's own notes or by the provision of a reading list with references to books in the school library or to mathematical journals and periodicals. In this way, able pupils will be encouraged to read some mathematics for themselves and to make good use of the mathematical books with which schools are often provided but which appear to be used so rarely. If pupils pursue individual themes in this way, it is beneficial for them to prepare a written report and to present their findings to other members of their group. This not only

helps them to clarify their own ideas, but also gives them practice in discussing mathematics with other people.

Study material

In choosing material for study, topics with a general application need to be selected which will also permit able pupils to achieve further generalization. In the earliest stages, gifted pupils may still wish to begin with practical experiences, but these will soon be dispensed with and serve only as a springboard to abstraction. Very gifted pupils appear to enjoy working with abstract quantities and eventually may create their own mathematics, inventing their own elements and formulating their own rules. Such a development should not be discouraged, but not all able pupils will become research mathematicians and many will need to apply their mathematics. A course based entirely on abstract mathematics and theoretical questions would be inappropriate for them, and they need to see and to use their mathematics in context. In school, it would seem necessary to maintain a balance between the complementary pure and applied aspects of mathematics.

Most pupils feel insecure when the way forward is not abundantly clear and they appear to welcome solutions obtained by standard procedures. Gifted pupils, on the other hand, are able to accept situations where the outcome is unknown and will appreciate that different solutions to the same problem may not all be of equal merit. Some schools keep a file of elegant solutions provided by pupils over the years and it is considered a great honour to have a solution included. While providing security for the average, standard procedures may well hinder the ablest; for example the recognition that the sequence 0, 3, 8, 15, . . . becomes by the addition of one to each term, the sequence of square numbers, shows more mathematical insight than the application of the standard technique of successive differences. Teachers of able pupils need to be prepared to accept unconventional approaches, provided always that they are mathematically sound.

In the past, traditional courses in geometry often gave able pupils the opportunity to demonstrate their mathematical potential. Not only did this develop spatial awareness and the ability to think in visual images, but it enabled pupils to experience and apply deductive arguments. In recent years, the impact of geometry has diminished; much less is now attempted and methods of teaching geometry have changed. If carried too far, this may result in pupils having insufficient experience of visual imagery and deductive argument. This is not to suggest that all pupils should return to a course in Euclidean geometry, but the ablest might benefit more if they were to study geometry in a more systematic way.

To encourage an interest in mathematics, some schools provide time each week for solving mathematical puzzles, and other teachers use a section of their noticeboard for a weekly puzzle corner. A similar development at national level has been the introduction of the British Mathematical Olympiad in which pupils compete against

each other in problem solving. But there are dangers; a pupil may spend too much time on puzzles, and it may become necessary for the teacher to insist that certain technical skills are perfected and that general mathematical work is carried out and presented in an acceptable form. Nevertheless, for gifted children, puzzle-solving can provide the stimulus for further open-ended investigations, particularly if they are encouraged to change the rules and discover new outcomes.

Sixth-form level

At sixth-form level, a teacher may help pupils considerably by occasionally attempting new questions without previous preparation. This is very demanding for the teacher and only to be attempted by those who are secure both in their mathematics and in their relationship with the class. Pupils can observe the teacher thinking round the problem and trying out various strategies, and they will be able to make their own contribution on an equal footing. When incorrect ideas are produced, it is often more difficult to convince the pupils of the reason for the error than to provide the correct solution. But the discussion will be of greater benefit to the pupils. Moreover, this kind of experience will serve to underline the difference between solving a problem and presenting a written solution.

In schools where there are few gifted pupils, they may have to be withdrawn by the mathematical specialist and follow-up work set for succeeding lessons. When this cannot be arranged during normal school hours, mathematical activities may be held in the lunch-hour or after school. Where a department cannot provide the mathematical expertise, it may be necessary to call on the services of a gifted mathematics teacher from another school, the local advisory service, or a college or university.

Giftedness in mathematics may well be difficult to identify, but when there is evidence of such talent, it is clearly necessary to treat the pupil with sensitivity and provide an environment in which his talent may develop. This is anything but an easy task, and little will be achieved by a belief that such children can look after themselves; these pupils, as all our pupils do, deserve the best that we can offer them.

The education of children gifted in the visual arts

ERNEST GOODMAN

Headmaster, Manchester High School of Art

In the bleak thirties, in a Black Country town on the fringe of Birmingham, an art teacher called C. V. MacKenzie performed two services for me which I value perhaps as highly as any other benefits which I derived from my school: he made me aware with gentleness and sensitivity of the rich variety of possibilities for delight and enlarged consciousness through the visual arts and, at the same time, unconsciously provided me with a model of all that is best in a teacher of art.

I do not consider that I was a *gifted* pupil – talented perhaps – but the necessity to make a distinction in practice between the two, at least in the arts, seems to me questionable and perhaps unwise. 'Mac' would never have made the distinction, but I am sure that his kindly and perceptive eye would never have missed any artistically gifted pupil who passed through his art room. Without the variety of media and resources which many schools now boast, he numbered among his ex-pupils an impressive list of successful artists, including several Prix-de-Rome scholars.

His main strengths as a teacher were a deep concern that as many of his boys as possible could come to share the delights of artistic production and awareness which he himself so manifestly enjoyed, the communication without histrionics of his own deep commitment, a patient concern for individuals, and, of an often forgotten importance to young people, the apparently magical craftsmanship and fluency of his own work.

His art room was a gallery. Every time we entered it he collected a halfpenny from each of us and with the proceeds amassed over the years an impressive collection of original works by both local and national figures, some of whom were greatly generous when he wrote explaining his scheme.

He also, of course, ran the local art gallery and art circle. Interested senior boys were quietly drawn into the activities of the latter body, and the fortnightly meetings at which we were accepted on equal terms by the adult artists in the viewing and discussion of their, and our, work were as eagerly awaited as the other more mundane highlights of our adolescent lives.

This brief picture of my old art teacher is not offered mainly as a tribute to a remarkable teacher, but because it seems to me to embody important guidelines for teachers who have the responsibility for the nurturing of the talents of pupils gifted in the visual arts.

Rightful role

In 1950, I had the great good fortune to take over a school where it was possible to build curricula in which the visual arts attained what seemed to me their rightful role in the curriculum. Perhaps, inevitably, I have since also had the deep pleasure of working with many talented pupils, all of them possessing in my view creative potential in advance of that which I possessed at their age, and among these were not a few whom I would classify as gifted.

Not unnaturally, perhaps, in striving to meet the needs of these remarkable young people, I have tried constantly to analyse the strengths of the situation which was created by C. V. MacKenzie so many years ago. I am sure that central to its effectiveness was the nature of the ambience which he created in his single art room. This was not always maintained without opposition. However, within his room art was a respected, purposeful and pleasurable activity, pursued with rigour, whatever attitudes were encountered outside. This purposefulness was reinforced by the tangible evidence, in the form of works of art, of the considerable success of past pupils in the art world, which not only fired our ambition, but raised the level of tolerance towards art in the rest of the school.

I am sure that a crucial requirement in the education of artistically gifted children is the creation of an ambience which implicitly communicates that their particular enthusiasm is not only valued in *them*, but as a respected and valued component of the school in which they operated, an approving and reinforcing ambience in which the arts can truly flourish. A youngster gifted in art need not then feel that his deep preoccupation is considered esoteric, of merely peripheral importance, or unmanly.

Thus a sense of security is of considerable importance if gifted children are to realize their full potential. So, of course, is approval, so long as approval is not so marked as to isolate unduly the gifted child from his less gifted contemporaries. Some gifted children can deal with this, but by no means all of them, and there always exists the danger that a youngster will hide his talents if the extent or form of approval of them brings him into social conflict with his friends.

Extended opportunities

Having said this, perhaps paradoxically the recognition of talent of a high order must call for special and extended opportunities for its exercise. In my experience, in a relaxed and stimulating art room, this carries little danger of jealousy towards the gifted child on the part of others, so long as giftedness is generously defined. The very nature of giftedness in the visual arts means that many of the short group exercises appropriate to the sequential development of other pupils are inappropriate to the artistic development of the gifted child. Additionally, the extent of their absorption in this field enables gifted children to undertake long-sustained tasks making essentially deeper demands on their visual and expressive powers. It seems to me that, particularly in the visual arts, these two modes

present little difficulty in promotion and control to an intelligent and competent teacher.

While the child's experience within the basic curriculum is of first importance, and the curriculum must be flexible enough to allow some variation of normal patterns for the gifted as much as for the remedial, the extension of opportunities for the practice of art outside class hours is also very important. This may take the form of experience of work on a different scale from the usual class work, or in media not generally available in class. Such opportunities can be created within the school premises or through facilities created outside school by the local authority. At appropriate stages, painting weekends, visits to specialist colleges, contacts with practising artists and craftsmen, and similar activities are of obvious benefit, although I am not at all sure of the value of many conducted tours of art galleries by undifferentiated groups. I also consider 'Mac's' practice of involving selected pupils in the activities of adult artists in the locality an excellent one, even if some art teachers have what I consider to be sometimes exaggerated reservations about this policy.

Gifted children are sometimes 'mavericks'. For this reason, a high level of tolerance of idiosyncrasy is essential. In the face of their strong urges to pursue particular paths with intensity, it is quite unproductive to expect them to conform strictly to a programme chiefly designed for the visual education of the majority, and sometimes it is better to surrender the tiller and pray, than to insist always on steering oneself. One does not obviously stop teaching, but with the gifted child the enabling and stimulating roles of the teacher become proportionately more important. Apart from this, it is wise for art teachers to be aware of the possibility of their own uncertainty as to the nature of the artistic process and the best educational means of serving it. If, for instance, one's view of the form and purpose of the art product is too personal and exclusive, one can 'turn off' the most gifted of pupils – even if they are recognized in the first place. If such youngsters are also articulate and inclined to argument, some unfortunate and potentially destructive tensions can result.

Recognition of talent

So far, I have said little directly concerning the recognition of giftedness. Given the conditions I have recommended, I would hope that the gifted would reveal themselves, much as does a particularly resplendent exhibition rose in an otherwise unremarkable flower-bed. Unless one has the necessary sensory powers, however, as well as a sharp awareness of the importance of their careful nurturing, even these can remain unnoticed. In my experience, the really competent art teacher does not need advanced powers of analysis to recognize artistic giftedness: he responds intuitively to a longed-for phenomenon. If one is forced, however, to attempt to define giftedness in the visual arts one ought, perhaps, to offer some clues. In my experience, such giftedness demonstrates itself when a pupil consistently shows an awareness of visual values in any of a number

of directions which cannot be explained in terms of the expected results of even good teaching. I am not now speaking of such things as the manipulative skills which so impress most of those outside art education, and not a few inside. These are not difficult to develop in a naturally skilful child. Most gifted children are, in fact, advanced in manipulative skills, but unless these are applied to more important and less easily evaluated ends, no giftedness can develop, and the skills usually atrophy rapidly in later stages. I am instead thinking of such things as the advanced capacity to read visual form; to organize spatial relationships and to reflect these sensitively in visual images in appropriate media with an apparently intuitive appreciation of the possibilities, limitations, and special characteristics of materials; and of an advanced ability to select significant forms and to synthesize; or a well-developed and often quirky delight in visual analogies and transformations. It is important to understand that artistic giftedness is not always multilateral; a child may have remarkable gifts in two-dimensional or even monochromatic images and almost completely eschew work in three-dimensions or in colour, if only at particular stages. On the other hand, he may demonstrate a staggering capacity for decorative originality and elaboration combined with a love of lyrical colour, and reject the starkness and graphic power of the work of other gifted people, both among his contemporaries and among adults. Evidently a high degree of sympathetic flexibility and open-mindedness are required of the art teacher. Directions as well as results are often unpredictable; creative teaching as well as creative artistry must involve the taking of risks. It is important to offer as much 'protected' autonomy as possible. For instance I have known pupils who have been released from set periods such as the High Renaissance in their programmes in 'art history and appreciation' produce sustained, illustrated, personal dissertations of high quality on such enthusiasms as Japanese art.

There is a rich variety of satisfying creative work available to those gifted in the visual arts. The range appropriate to particular individuals will, of course, vary according to personal specialisms and intellectual capacities, but for many careers in art and design creative ability is of first importance. For the few, personal eminence in the fine arts is still possible, but more will support their private work by at least part-time work in other creative fields such as teaching or design. The opportunities in the general field of design are impressive – and so varied as to make detailed comment here impossible. Old students of mine have, for instance, succeeded at a high level in architecture, graphic design, advertising, ceramics, textiles, fashion, interior and furniture design, television design, exhibition design, toy design, illustration, film and animation, and museum work. This is not a complete list and, of course, by no means exhausts the possibilities.

For those whose interests are highly specialized and for whom full-time employment by a firm or agency is unattractive, there are rewarding opportunities for freelance work, particularly in such

fields as graphic and advertising design, fashion, textiles, and photography. A number of my old pupils have, additionally, become consultants in various design fields, directors of agencies, or self-employed craftsmen.

One could continue in more detail, but I am doubtful as to the value of this without the use of visual images. Perhaps I may instead be allowed to finish by drawing attention to the frequency of my use of the word 'delight'. This is a word which is not frequently used in current educational discourse, preoccupied as this so overwhelmingly is with the practical uses which society makes of the products of its schools. I am sure, however, that I am by no means alone in believing that it should be central to the aims of education. In any case, I would be decidedly unhappy if it were generally thought that it was less appropriate to the needs of gifted children than to those of more pedestrian operators like myself; we are, after all, talking about *children*. Nor, I hope, will the recent strengthened interest in the education of the gifted hinge even mainly on the contribution which they can make to the well-being of others. They are entitled to their own fulfilment.

Trends 1977/2

Children with exceptional ability

JOAN DEAN

Chief Inspector, Surrey County Council*

It is perhaps not very surprising that the Education Committee of a county like Surrey, which has a high proportion of able children in its schools, should be concerned about the provision of education for the exceptionally able. This concern was strongly felt in 1971, when the decision to go comprehensive was reaffirmed and the county council decided to keep some places in direct grant and independent schools for the 1 per cent of the school population who might be described as exceptionally gifted. This arrangement is now gradually developing into a scheme for looking at individual children who appear to have exceptional needs and considering how best these can be met.

* Mrs Dean's photograph is reproduced by courtesy of the Surrey County Council.

In most cases, we would hope to meet the needs of exceptionally able children within Surrey's own schools. We therefore sought ways of supporting such children and their teachers at all stages and, with this in view, set up a group of inspectors and psychologists to consider what was needed.

Some of this group's work has been concerned with identifying situations in schools which could be developed further. It started work in 1972, when the headmistress of a first school told us that she had an exceptionally able 7 year old boy in her school. The inspector/psychologist team's investigations substantiated her views and, after discussion and planning, we agreed to provide an extra half teacher for a time so that the school could form a small group of very able children for part of the day and explore what might be done with them. A scheme was developed which included extensions of normal class work, some new work and a good deal of discussion; it was successful in many ways. At the end of the first year, the teachers concerned said: 'We feel the most dramatic development has been in these children's confidence. They are able to argue, discuss and talk about a point of interest, often drawing upon an experience outside the school situation in a much more mature manner than two terms ago . . . This is reflected in the development of their vocabulary and written style. Their interest in the work we have done has often led them to produce good work at home, without the request of a teacher. Frequently a morning spent discussing and observing has been sufficient to enable them to continue working throughout the afternoon by themselves'. The teachers also commented that the whole age group had benefited from the extra material prepared for this group.

This experiment has been taking place for four years and a method of team teaching has developed which enables teachers to work with a number of groups of children with special needs. There have been several changes of teachers in the team, but the expertise gained has been shared so that the school has continued to build on what had gone before.

Other schemes

In another area, middle school teachers have developed work with the Cort* material, which has proved to be valuable with children of all abilities. They have allowed the exceptionally able children to develop ideas further and in more original ways than the others. Interest is also developing in secondary schools and one school is now offering able children opportunities for additional work in mathematics and languages after school. A 'taster' Russian course for sixth formers has also been provided with the help of Surrey University.

Some of the most promising work has been done with groups of children from a number of schools. In 1974, for example, a three-day

---

* Edward De Bono.

residential course for sixth formers with exceptional ability in mathematics was set up with the help of university staff to give students the opportunity of meeting other exceptionally able mathematicians and of looking at aspects of mathematics normally outside the school programme. This stimulated such interest and enthusiasm among the students and in their schools that we have repeated the course three times already and hope to offer it again this September.

Each of the three courses run to date has been followed up and teachers and students have been asked separately for their reactions, which were favourable in each case. Some students had revised their ideas about the value of a university education and the prospect of a career as a professional mathematician. Some of the students' comments highlight the problems of the exceptionally able, for example: 'The conference certainly opened my eyes to what mathematics is about and stimulated me, almost frightened me, making me think more deeply. It renewed my mathematical interest which sometimes flags when restricted to a syllabus'.

The schools also reflect the additional stimulus which the course offered and teachers remarked on 'a more eager approach to reading round the subject' and 'improvements in attitudes towards the subject, which were already good'. Students are very carefully selected for these courses by personal interview with those put forward by their schools. Agreed criteria are used which include evidence not only of outstanding ability, but also of underfunctioning as well as evidence of interest in the subject. It was hoped that the course might regenerate their enthusiasm or exploit their interest.

Other courses

Selection for a rather similar language course was carried out by the schools themselves and it was interesting to note the predominance of girls in contrast to the mathematics courses where boys were in the majority. It was a two-day, non-residential course consisting of lectures by university staff on language acquisition, interference between languages, translation, and a final lecture on Nazi Germany using unpublished visual material by a German artist. There were also two lessons in Swedish which gave students a chance to experience a new language.

Students were enthusiastic about the course and wished to hold further meetings, while the inspector running it felt that they had added new dimensions to their view of languages. Both of these courses had been planned as an enrichment to the normal curriculum. Another mathematics course was held for middle school children and their teachers with rather a different aim, although we expected enrichment to be an important by-product.

This was a two-day course for a small group of fourth year (11–12 year olds) middle school children and their teachers, held at a teachers' centre which had been set up as a mathematics workshop. The main aim was to explore what might be achieved with the age group. Here again, the children were selected by the schools, with

two or three children coming with a teacher from each of seven middle schools. The group consisted of fifteen boys, six girls and eight teachers.

The children were offered a wide choice of activities, including optional sessions on how a computer works, a videotape of a programme on the history of mathematics, and a film. There were also plenary sessions at the beginning and end and a visiting speaker. The variety of opportunities was generally appreciated by the children. As one child put it: 'I think the best part was that we could do what we liked, explore our own problems, not be put in front of an exercise and told to do it'.

Another interesting comment shows the kind of wondering which perhaps reflects the need able children feel for an opportunity to explore more widely: 'A thing I feel quite strongly about and that is in some way to tell us or make it possible for us to find out for ourselves how certain formulae or tables are established. . . . We know what πr^2, πd and $\pi r^2 h$ equal but how do we get them? How do we know that π equals 3·14 or 22/7 or even Pythagoras' Theorem equals what it does? How do they decide upon logarithm tables? I think that this point should be taken up because it is a useful thing to know this information'.

The teachers in the group met together in the week following the course to discuss what had happened. Like the children, they found much to interest and stimulate them and they noted the children's ability to work unsupervised and their persistence with problems. They had become more aware of the extent to which teaching could be open ended with such children – a point made, in a different way, by the children themselves. A comment by one teacher sums up the difficulties thoughtful teachers often experience in working with children of exceptional ability: 'I wanted to come because I so often feel at a loss as to what to do with these children in the classroom'.

Solving the problem

A great deal of what Surrey is doing and planning is concerned with the solution of this problem. There will be many situations in which exceptionally able children need individual programmes of work if their potential is to be realized, but there is a shortage of suitable material to meet such needs. Schools often meet this problem by giving children the work usually covered by older pupils. This is not altogether satisfactory, because a child may be intellectually able, but only average in other aspects of his development, and in some subjects a certain level of social and emotional development may be needed for understanding. A good deal of learning is also dependent on experience which cannot be speeded up. There is also the problem of the child who has worked well ahead of his age group being tempted to mark time or even being forced to do so, if his teacher is not prepared to provide separately for him.

Able children can often deal with the normal curriculum more quickly than the others but the time saved should be used profitably. There would seem to be a strong argument for providing able

children with a much broader and richer curriculum at every level, but at present very few teachers and schools have sufficient resources to do this. In Surrey, we are therefore trying to develop or buy materials which we can loan to schools for individuals who need them. We are working with teachers in the production of videotapes and other aids for individual and small group use, and are buying suitable foreign language courses. Eventually there will be a bank of material which our schools can borrow. So far, we have tapes on some aspects of mathematics, science, and on literature, and others are planned in various subject areas.

Identification

Much of the discussion about exceptional children centres on the problem of identification, and many people feel concerned that special treatment following identification may have adverse effects. We have tried to work positively at this, stressing the importance of looking at the individual needs of all children and of providing for those whose needs are unusual, whatever their ability. In a number of areas in the county, we have formed teachers' groups which are looking with us at the children in their classes, considering whether some need opportunities for a richer programme, and planning towards it. It is interesting to note that some of the most successful work of this kind appears to benefit all the children partly by extending the teachers' thinking and partly because such work tends to be more open ended. It may also provide models of what can be achieved and these raise the sights of everyone concerned.

Our experience over the past few years suggests that there are no easy ways of providing for the exceptional child. He needs some opportunity for work with his intellectual peers and some opportunities for learning to live with people of all abilities. Each child's needs are unique and although this is true to some extent for every child, the needs of the gifted child are often unusual and difficult to provide for. This is especially true of the child with a creative and original mind.

Gifted primary children in Redbridge

BARBARA TAYLOR

Head teacher, Wells Primary School, Redbridge. Previously primary advisory teacher to Redbridge LEA

Gifted children have been defined narrowly as those with an IQ of over 140, representing, according to various authorities, between 0·3 per cent and 2 per cent of the population. In the widest sense, the gifted child may be defined as 'any child who is outstanding in either general or specific ability in a relatively broad or narrow field of endeavour. Where generally recognized tests exist as, say, in the case of "intelligence", then giftedness would be defined by test scores. Where no recognized tests exist, it can be assumed that the subjective opinions of "experts" in the various fields on the creative qualities of originality and imagination displayed would be the criteria we have in mind'.* It is with the children described in the wider definition that we are concerned in Redbridge.

Nationally very little has been done for the gifted child. Research has indicated that gifted children are not always recognized and that when they are, many are underachieving. This, of course, often produces bored children with all the attendant problems. There are three groups of reasons for these findings. First, the children's expectations determine their attitude. An able child will quickly assess the effort and output necessary to placate authority. He is also usually anxious to conform to his peers. Consciously or subconsciously a child may suppress a talent in order not to evoke undue reaction. Second, teachers' expectations may be too low. This may occur through lack of experience or training. A teacher's opinion may be biased because of the social class or cultural background of the child. A child's personality may confuse: the neat, hard-working child appears more able than the untidy tearaway. Lack of specialist knowledge may mean that the teacher does not recognize the child's ability in a specialism. Third, there are the practical problems involved in teaching gifted children. Providing enough work of a sufficiently high standard for a few children of diverse specialisms, combined with coping with children who are easily bored but able to disrupt a class, is a daunting if not impossible task for the primary class teacher.

Providing help

In Redbridge we felt that we could help in two ways. First, the teachers needed guidance in recognizing gifted children and this

* Ogilvie, Eric. *Gifted Children in Primary Schools*. Schools Council Research Studies, 1973.

meant teacher education. A course of five two-hour, sessions was organized. The aim was to make the teachers more aware of the gifted child by a discussion of aids to recognition such as the West Sussex Psychological Service check-list of characteristics,* the use of a battery of group tests including verbal, non-verbal, spatial and attainment tests and, if necessary, an individual test. The teachers were advised to make use of and give weight to the opinions of parents and experts. The discovery and discussion of common problems was also valuable. The meetings were followed up by help from the advisory team in the classroom, seeing and testing children, and advising on attitudes to children and parents as well as giving specialist help.

In general, the teachers who attended our course were already aware of the problem and were ready to absorb and evaluate advice. It is, of course, in the classroom that one must help teachers who may not be aware that the difficult child in the class is a frustrated child. While they recognize the need to attend courses on various curriculum areas and find it necessary to receive help with teaching handicapped or remedial children, teachers find it much more difficult to realize that they need help in teaching gifted children, as the gifted children do not always show themselves as such. It is possibly an area where school-based in-service training would be effective. Particular children could be studied and advice given which took into account the personality and background of the child and the ethos of the school. Second, we felt we could give practical help, particularly to non-specialist teachers, in the form of material to enrich the curriculum of the gifted child as well as to raise the sights of the teacher.

Schools Council project

Fortunately, we were able to join in the final phase of the Schools Council project on gifted children. As a consequence of his report, *Gifted Children in Primary Schools*, Dr Ogilvie, Principal of Nene College, Northampton, was asked to prepare learning units for very able primary children. These Schools Council Curriculum Enrichment Projects (SCCEPs) provided individualized learning for approximately a term's work. They were aimed at the top 15 per cent, thinking in terms of specific abilities and not of children with high all-round talent. The children were given responsibility for their own learning. Cassette tapes and slides were used as well as written material. The teachers were introduced to the material by members of Dr Ogilvie's team during our course at the Redbridge Teachers' Centre. The Projects were in four banks devoted to the curriculum areas in mathematics, the expressive arts, the humanities and environmental science, with one unit for each age level from 7 to 10. The banks contained groups of units which, taken together, comprised developmental schema. The child was not kept on a narrow

* Hoyle, E. and Wilks, J. *Gifted Children and their Education*. Department of Education and Science, 1974. Free from DES.

sequential path but was led on to investigate and/or create in ways which may have occurred to a talented child but not to a teacher. The units introduced new necessary facts and new learning skills and led to new generalizations and principles. They contained different teaching methodologies. In simple terms, they provided advanced material at junior maturity level.

Volunteer teachers

After studying the SCCEPs, the teachers volunteered to use one if they had a child whose attributes matched a Project's requirements. The teacher's assessment of ability was the only criterion for choice of a child. Dr Ogilvie said in his notes on the SCCEPs: 'For whom? For what? It is a fundamental principle of teaching that in the final analysis, only an individual teacher can decide when to engage a particular child in a particular learning activity'. As part of the trial phase, the teachers also administered a battery of National Foundation for Educational Research (NFER) tests and provided exhaustive profiles of the children. The children's work was also used to provide assistance to teachers considering using the published SCCEPs in matching the material to the pupil. The matching of material to pupil was a first essential.

Eleven schools in Redbridge took part, using forty SCCEPs, some from each of the four banks. The most popular were the art and the environmental science banks, possibly indicating the areas where the teachers felt most in need of outside help. The children ranged from one boy who scored 140-plus (the ceiling) on all the NFER tests and used a mathematics SCCEP, to another who was unable to cope with any of the tests but whose expressive arts work was exceptional.

In general, teachers in Redbridge are now more aware of the gifted child and recognition is becoming more common. Recognition is happening among the Asian and West Indian children where poor communication skills and the shortage of culturally unbiased tests make it a difficult task. The teachers are aware of the available resources and are using them increasingly.

Our participation in the Schools Council Project had many results. The teachers had specialist prepared work and visual aids available which gave the children topic work at a higher level than they would have chosen themselves. The children enjoyed the units, and their higher order skills and thought levels improved. There was also a spin-off to the other children not originally involved. Teacher expectation levels were probably raised among those taking part, but more training is still needed.

We look forward to having the four banks of SCCEPs available in Redbridge for our teachers' use at any time. The material is most certainly needed. These, combined with early and thorough teaching of basic and information seeking skills, continuing teacher education, and available expert advice, should go some way to improving both the recognition and the achievement of gifted primary children in Redbridge and elsewhere.

The European Schools

The European Schools were established to provide educational facilities primarily for the children of employees of the European Economic Community (EEC). They have their origin in the school opened in Luxemburg in 1953 for the children of officials of the European Coal and Steel Community. In 1957, the Ministers of Education of the then six countries of the Community took over the school and swiftly proceeded to open European Schools in Brussels (where there are now two), in Mol, also in Belgium, in Varese (Italy), in Karlsruhe (West Germany) and in Bergen in the Netherlands. In 1977, a similar school will open in Munich for children of the staff of the European Patent Office. This is a widening of the scope of the European Schools as countries which are not members of EEC will have staff at the Patent Office. The following two articles deal with European Schools: the first is a general article and the second gives a personal account of life in a particular European School.

Trends 1977/2

Schola Europea ex foedere novem nationum*

D. T. E. MARJORAM

Staff Inspector with special responsibility for secondary education

R. C. WILLIAMS

Staff Inspector with special responsibility for external relations

In September 1976, there were 10,095 pupils in the seven European Schools and 622 teachers. The largest School, in Brussels, had 2,787 pupils and the smallest, in Bergen, 620 pupils. The number of pupils continues to increase and the total roll has risen sharply since the entry of the United Kingdom, Denmark and Ireland into the Community. At present, there are about 700 British pupils in the Schools, the majority of them in Brussels or Luxemburg. Fifty-six British teachers hold appointments and a British headmaster was appointed to Mol in September 1976. Vacancies for British teachers are advertised in the educational press in this country and are filled after interview at the Department of Education and Science.

Organization

There is a single Board of Governors for the seven Schools, consisting of delegations from the nine member states and from the Commission of the European Community. The Board meets every six months and is assisted on pedagogical matters by two 'Conseils d'Inspection', on each of which member countries are represented by an inspector, and on financial matters by an administrative and finance committee. The 'Conseils d'Inspection' are actively involved

* 'European schools based on an agreement between nine nations'.

in curriculum development within the Schools as well as with organization, staffing, and inspection. Parents, teachers, and the Commission send representatives to the Committee and each School also has its own administrative committee. An office in Brussels, headed by the permanent representative of the Governing Body, deals with matters of general concern and organization and is in constant touch with the ministries of education of the member countries.

Each of the European Schools has a kindergarten and primary and secondary departments. The kindergartens are optional but are in great demand; they generally cover the age range 4–6 years. Compulsory schooling begins at the age of 6 and continues until 16-plus with a further two years leading to the European Baccalaureate examination. (It is important not to confuse this with the International Baccalaureate.) A distinctive feature of the Schools is their organization in language sections so that pupils receive the greater part of their education in their mother tongue. In the largest Schools in Brussels and Luxemburg there are six language sections – Danish, Dutch, English, French, German and Italian – covering the languages principally spoken in the countries of the EEC. There are flourishing English-speaking sections in Brussels and Luxemburg, and at Varese, an English section has recently opened at the primary level. Most of the teaching of English as a foreign language in the seven Schools is now in the hands of native speakers of English while in Brussels and Luxemburg the large English sections mean that there are specialists in almost all subjects of the curriculum.

Considerable importance

Not surprisingly, considerable importance is attached to the learning of foreign languages. At the primary level, English, French or German is studied from the age of 6 and at the secondary level second, third and even fourth languages may be added at various times. Though pupils spend most of their time in a given language section, they also work in groups of mixed nationality, in 'European hours' for art, music and physical education in the primary school, and for some foreign language classes in the primary and secondary school. Additionally, from the third year of the secondary school onwards, history and geography are studied in the 'langue véhiculaire', usually the first foreign language of the pupil. Extra-curricular, sporting, and social activities also take place in mixed groups so that many children and teachers achieve an impressive degree of fluency in two or three languages other than their own.

Primary and secondary departments each follow harmonized curricula in the various language sections, though national styles of teaching are readily recognizable at all levels with the work in some sections being more teacher-centred than in others. Even at the primary level, there is a preoccupation with marks which seems strange to someone from this country. In the primary and secondary departments, a pupil who does not make sufficient progress may be required to repeat a year, a practice long since abandoned here. The

English-speaking primary classes work along less formal lines than some of the other language sections but all of the work is of a high quality. Daily lessons are in the mother tongue and there are classes in mathematics, a foreign language, history, geography and 'morale' or religious education, which is taken by a priest of the appropriate denomination. Generally speaking, the 'basic' subjects are taken very seriously indeed, with perhaps slightly less emphasis on the so-called 'non-academic' areas of the curriculum.

Curriculum development

Curriculum development has received great attention over a wide area of the primary programme during the last few years. A working group concerned with the reform of the primary school is studying such problems as the practice of repeating a year, providing remedial help and resources, record-keeping procedures and the problems of liaison in the transition from primary to secondary school. The programme in mathematics has been revised in detail and a new programme for the teaching of English as a foreign language is in use. At the secondary level, there has been less change, though a working party is preparing reforms which will be progressively introduced from September 1978.

Secondary education

At present, the secondary departments resemble the traditional French *lycée* with its strong emphasis on the 'academic' subjects. Work in the mother tongue, in mathematics and in foreign languages takes up a good deal of time. Little time is given to the 'creative' subjects and in the lower forms the science is biology. Changes are being discussed, however, and from 1978 the introduction of the second foreign language may be postponed by a year, more time will be given to art and music, and a programme of combined science will be followed for three years. At an in-service training course for teachers of science in the European Schools, held in Canterbury in April 1976, they expressed considerable enthusiasm for a 'Nuffield type' approach in the early years of secondary schooling. A specialist working group has been set up and the new syllabus will, it is hoped, be introduced in 1977 or 1978. The practice of repeating a year until at least the end of the third year of secondary schooling is likely to be abolished.

By the beginning of the fourth year, all pupils have chosen the range of subjects, out of five possible groupings, for the European Baccalaureate examination normally taken at 18-plus. The mother tongue, a foreign language, mathematics and, from the sixth year, philosophy are compulsory subjects; a second foreign language is normal and subject groupings allow classical languages, modern languages, mathematics and science or economics and social science to be emphasized. A system of continuous evaluation by means of regular marks and by examination is carried out on these programmes which run for four years. Up to the end of the fifth year, the

curriculum bears a reasonable resemblance to that of a British secondary grammar school, but there is no equivalent in the European Schools to GCE O-level, and no subjects are dropped at the end of the fifth year. The result is that the sixth and seventh year programmes are much more wide-ranging than those undertaken in this country and lay much greater emphasis on 'culture générale'. Clearly no subject goes into the detail of a GCE A-level syllabus but this is not to say that standards are anything but high; a student who completes the course at a European School will have undergone a demanding programme of study.

European Baccalaureate

The only 'external' examination taken by pupils of the European Schools is for the European Baccalaureate. The United Kingdom has accepted the European Baccalaureate as the equivalent to those GCE passes which entitle the holder to apply for entry to a British university. At the request of the Department of Education and Science, the Schools Council undertook a comparability study of the European Baccalaureate and GCE A-level and recommended that the award of the Baccalaureate might be considered the equivalent of four A-level passes. Pupils from the schools, and not only of British nationality, are beginning to apply for entrance to university in this country and are being accepted on the strength of their achievement in the Baccalaureate.

Because of our comparatively recent entry to the EEC, British children will not take the Baccalaureate in any number until 1978. The examination may be divided into three parts: written papers are taken in six subjects which together carry a maximum of 120 out of the total 300 marks; papers in the mother tongue, mathematics, philosophy and a foreign language are taken in each section as well as the specialist subjects; and four subjects are examined orally – the mother tongue, a modern foreign language and two others chosen by lot shortly before the examination from among the subjects studied by the pupil during his or her last year in the School. One of these subjects is literary, the other scientific, and neither will have been included in the written examination.

The oral examinations are a considerable test of the candidate's ability. They rightly carry 80 out of the 300 marks. The third part of the examination refers to the assessment of the classwork done during the last two terms of the final year which may include as many as thirteen subjects. It carries 100 out of 300 marks and therefore is a vitally important part of the examination. The overall pass mark is 60 out of 100 but the performance of those candidates who obtain between 54 per cent and 59·9 per cent is reconsidered by a jury of inspectors, external examiners and those who taught the pupils in their last year. A high proportion of candidates are successful in the examination which is hardly surprising since the pupils are well motivated and the parents usually supportive; the system of repeating a year tends to weed out comparatively less able pupils; and there are very able teachers on the staffs of the Schools. A

student who achieves a high standard in the European Baccalaureate is well prepared for university work in a wide range of subjects.

The examination, for which 371 candidates were entered in 1976, is controlled by a jury consisting of a university professor, nominated by a member state of the EEC, as president, the nine secondary inspectors as vice-presidents, a panel of external examiners from the nine countries, and the internal examiners who are teachers in the Schools. Candidates are conscientiously and thoroughly assessed under many headings which take into account their personal maturity as well as their intellectual development.

International cooperation

The European Schools are an interesting experiment in international cooperation and education. They attract a good deal of attention and a certain amount of criticism. In theory, they are well placed to attempt new projects in curriculum development and to make new approaches to teaching and learning. Too often, perhaps, they look over their shoulders at what is happening in the member states and are cautious in initiating or adopting reform. They need to vary their aims and to pay more attention to the needs of the less academic child who may leave school at 16, though previous attempts to do this have met with little parental support. The entry of Denmark, Ireland and the United Kingdom to the Schools has already had some influence on basic educational issues, but traffic is not only one way as the new member states can learn a great deal from the other European systems of which they now need to be more aware.

Trends 1977/2

The European School, Uccle, Brussels

MICHAEL FARRAR and HENRY CHRISTIAN

The authors are both British teachers at the school

The European School at Uccle in Brussels is the largest and, as a result, perhaps the least typical of the seven European Schools. A pupil body of 2,800 and a restricted site have combined to exaggerate the difficulties inherent in the European concept. Our first impressions, indeed, were of crowded corridors, noise in six languages,

and the problem of how best to reprimand an Italian pupil for going up the down-staircase.

The mixture of nationalities is the most obvious feature of the European Schools. Teaching in the Schools is not the same as teaching foreigners in the framework of a teacher's own national system or, indeed, as teaching an international student body in those international schools where one nationality remains dominant. Here there is not the secure background of shared experience and assumptions. The range of attitude and feeling among both teachers and pupils is wider here than in any one of the national systems. It is clear that many problems are, as a result, more difficult to solve. Yet it is also true that it is often possible to draw on a wider range of experience to find solutions. The debate in the European Schools about mixed ability classes is conducted along different lines from a purely national debate on the topic. French or Danish experience of integrated social studies courses can be explained at first hand and becomes an element in the discussion on their introduction into the European Schools. The Schools are not, however, merely the products of a continuous series of compromises between national systems. Discussion may take place in the light of national experiences but the solutions have to work in a specific situation which is in no way similar to any of the nine national systems. The European Schools have the task of educating the children of community officials. This is a practical task that calls for practical solutions. It is in this very specificity of the solutions proposed in the Schools that they can best be called European. They are not models for a future European education system but the everyday answer to the specific problem of educating nine different European nationalities, an answer which, as far as possible, tries to build on the opportunities for mutual understanding and tolerance that such a situation presents.

Dealing with the problem

The Schools deal with the problem of teaching pupils of different mother tongues in the obvious way – by creating six linguistic (not national) sections. This may at first sight seem to be an obstacle to the mixing of nationalities that the Schools try to encourage. Teachers, indeed, are well aware of differences between the linguistic sections. French pupils tend not to expect as close a relationship with their teachers as the Dutch and the Danes do. Attitudes to written work vary, the Danes not being used to written homework, for example. The Dutch have a more informal approach to learning than the French or the Germans who seem more at home in a highly structured and formal lesson. These are generalizations and like all generalizations break down when applied to particular individuals. Yet the fact remains that a teacher has to feel and take account of these differences if he is to teach effectively outside his own linguistic section. It is no good overreacting if a Danish pupil calls you by your surname only or if a Dutch girl begins to knit during a lesson you regard as particularly fascinating.

There is, of course, a common curriculum for the six linguistic sections and in planning this the Schools have taken account of two rather different objectives. Pupils arriving from different national systems, sometimes in the middle of their school career, have to be led to a common leaving examination – the European Baccalaureate. They must also, however, be able to return to their national systems if necessary without too many problems of adaptation. Harmonization between the linguistic sections is difficult to achieve in this situation and is made more difficult by the wide variation of teaching techniques and the lack of common textbooks. In mathematics, for example, the arrival of the new member states in September 1973 led to a move away from the fairly rigidly harmonized syllabus of the first three years to a rather more flexible one, based on a common core covering these first three years as a block.

Differences exist then between the linguistic sections. The Schools, however, make a deliberate effort to promote contact and, in certain subjects, integration between these sections. As the sections are linguistic and not national, the English-language section is composed of British and Irish pupils. Even within each nationality, pupils come from a very wide area. The effect of this in certain subjects such as history, geography and the mother tongue is to throw the teacher back towards his mother country to broaden the area he covered at home. There can be no local examples from the pupil's mother country in history and geography. There can, however, be a variety of local knowledge – superficial in many cases it is true – which makes pupils more aware of the diversity of their own country. We find it desirable to encourage pupils to interest themselves in their home region, to bring pictures and to give talks, for example. The diversity within each linguistic section is increased by the fact that many pupils are from mixed marriages. In the present English-language section first year, ten out of twenty-seven pupils come from such a background. It is possible too for a pupil to work in a linguistic section that does not correspond to his mother tongue. In this same English-language first year, there are two Dutch children and one German. Some linguistic sections are more mixed than others, of course. The French and the English-language sections are probably the most mixed, the Italian and the Danish the least.

As pupils move up the School they come into contact more and more with nationalities other than those in their own linguistic sections. From the first year, pupils do PE and often have art and music with a teacher of another nationality. The European School at Uccle has also established mixed nationality school trips which take place once a year in the summer. Working trips to neighbouring countries are organized for the third and fourth year pupils while more ambitious excursions are offered to the fifth and sixth year pupils to Rome, Berlin, Copenhagen and Prague, for example.

Mixed nationality classes

Perhaps the biggest effort at integration is made through the creation of mixed nationality classes. In Brussels, these exist for modern

languages from the sixth year, for economics from the fourth year, and for history and geography from the third year.

Starting in the third year, pupils do history and geography in a foreign language. They can choose one of the three languages which are designated as 'working languages' – French, German and English. They may not, of course, choose their mother tongue. This obligation to do history and geography in a foreign language makes it possible to have mixed nationality classes, mixed in the sense that a class consists of pupils of different nationalities and in the sense that teacher and pupils are not of the same nationality.

As this in our view constitutes one of the originalities of the European Schools, and as our experience lies in this field, it may be worth discussing how the system works in practice. Some language teachers think that the third year is too early to subject pupils to the relatively unstructured linguistic environment of history and geography classes. It is true that some pupils experience difficulties but it seems that these difficulties arise in certain fairly specific cases. In general, French-speaking pupils in Brussels, for example, find history and geography in German particularly taxing. The linguistic background of the school clearly plays an important role here. Pupils in Brussels do not meet German in their everyday lives and there is no doubt that German is a more difficult vehicle of instruction for French-speaking pupils than English. It is possible to teach history and geography in English to French-speaking pupils by relying heavily on words that are similar in both languages, and by only gradually introducing the historical and geographical vocabulary that presents difficulties.

Clearly the whole approach to teaching these subjects has to be rethought in this new linguistic situation. We have found that certain techniques from modern language teaching can be applied to history and geography. Oral participation can be encouraged by the use of question and answer techniques in which the form, if not the substance, of the answer is always the same. Board diagrams showing sequences of historical development are a useful framework for discussion. These reduce the linguistic complexities to a minimum and enable a pupil to talk through the diagram at his own level – the weaker pupils confining themselves to the bare skeleton, the more advanced pupils attempting to supply a certain amount of flesh. To encourage writing, we have found multiple choice questions, substitution tables and compietion exercises all very effective. However, these structured aids to learning are simply not necessary for some nationalities doing history and geography in English. The Danes and the Dutch with few exceptions already have a certain autonomy in the language in the first year of working-language teaching.

This year, we both teach a sixth year class, composed for the most part of Danes, who have been doing history and geography in English now for three and a half years. We both agree that the results obtained in this class are very satisfactory. Some essays recently submitted displayed a maturity of judgement and a linguistic

competence equal to anything we have seen in a British first year sixth.

The effect on teachers

The effect on the teacher working with mixed nationality classes is equally salutary. Not only does the teacher have to decide clearly on the elements of the topic he wants to teach, he also has to make certain that the pupils fully understand the vocabulary he wants to use. This leads necessarily from a discussion of the meaning of words to the concepts behind the words. We are certain that pupils in the European Schools have a better understanding of certain historical and geographical concepts as a result of this necessity of adopting a more linguistic approach.

Any initial linguistic inconvenience in working-language teaching is more than compensated for by the possibility of working in mixed nationality classes. These classes are a constant reminder to the teacher that he must open out his treatment of a topic. Events have to be seen and described from several viewpoints. In many respects, this means that the problems to be discussed have to be redefined in terms of European themes. The attitude of monarchs to the reformation, for example, is a theme of European significance and involves a discussion of Christian III of Denmark, Francis I of France, Henry VIII of England, James VI of Scotland, and the Emperor Charles V, to name only a few. The form of the problem and of the solution may be specific to each monarch but no one can doubt that they were part of a European phenomenon. National examples, in short, must be related to a European theme. The strange separation between national history and European history cannot exist in the European Schools. As far as geography is concerned, in discussing, for instance, the problem regions of Europe, the class group is likely to consist of students who come from the country in question and will often view the problems in a very different way from the rest of the class. Not only is the discussion very stimulating in these circumstances, but one is aware of seeing contemporary problems in a rather broader perspective.

We recently asked our fourth year German class whether they felt European. Most of them have been in the School since the age of six; eight of them were born in Brussels. They smiled politely. Yes, they felt European they said and changed the subject. Maybe the question shouldn't have been asked. Pupils in the European Schools do not spend their time talking about European identity or the exciting possibilities of European integration. They don't need to. They are living the process of European integration in their daily lives and come to accept the situation as normal. As anyone with practical experience of working with different nationalities will confirm, the real test of international understanding is not how well you can construct shimmering theories, but simply how well you can live and work together. It is perhaps a measure of the success of the European Schools that European integration is felt to be a rather ordinary everyday experience.

Trends in assessment: A Scottish contribution to the debate

P. M. BROADFOOT

Research officer, Scottish Council for Research in Education

In the past few years, secondary schools in Scotland have been affected by two organizational changes with the most profound implications – one, the near completion of comprehensivization, the other, the raising of the school leaving age to 16. One of the effects of these changes has been to reveal the inadequacy of current methods of assessment and certification. This article considers what improvements might be made.*

In a school system that requires all children to attend school for at least eleven years and embodies a commitment to equality of provision and non-divisiveness, a certification scheme to mark the completion of compulsory education, geared as it is in Scotland to, at the most, 50 per cent of the year group, is manifestly illogical and incompatible.

The need to find a more equitable and appropriate system of 16-plus assessment is reflected in the Schools Council's search for a common examination at 16-plus and in the setting up in Scotland, by the Secretary of State for Scotland, of a large and prestigious committee to review Scottish arrangements for assessment and certification at 16-plus. Already in 1973, the Headteachers' Association of Scotland were concerned about the large numbers of pupils leaving school with no nationally recognized certificate. They were concerned that in many cases, in default of suitable, recognized courses, these pupils had to undertake courses which were entirely unsuitable for them and which a substantial proportion were bound to fail. Thus the Headteachers set up a working party to devise a possible alternative assessment and certification scheme. Their aim was to develop a secondary school assessment system which would meet the needs of all pupils for self-knowledge and curricular and vocational guidance while still in school, and which would provide the information for a relevant and useful leaving report for all pupils.

Assessment for school and work

Assessment at 16-plus is for many pupils the interface between school and work. One of the difficulties in designing a useful

* Although the research work to which this article refers was funded by the Scottish Education Department, the views expressed in this article and in the published report are not necessarily those of the Department.

certification system is to reconcile the information needs of employers and those of the school. It is necessary both to provide valid and relevant goals which relate to school courses and, at the same time, to provide the less subject-centred assessments of skills and personal characteristics which employers find most useful in matching applicants to jobs. The working party tried to overcome the divide between school and work by incorporating representatives from tertiary education and the world of employment. In seeking to design acceptable methods of assessment, it recognized that assessment can and does perform a variety of roles in the education system. These roles range from providing information on the standards being achieved by schools, through that of social and vocational selection, to giving pupils and teachers feedback on day-to-day and even minute-to-minute progress. It is arguable that the use of existing certification systems to fulfil a variety of different roles results in their fulfilling none of them particularly well. Thus, in seeking to provide assessments which would be useful and relevant to all pupils and to those concerned with guiding and selecting youngsters, the working party established three basic principles that they felt this assessment procedure must fulfil.

Above all, the procedure had to be practicable – a necessary if not sufficient condition for all innovations. It must be flexible enough to suit any type of school organization, curriculum or assessment technique, and require the minimum of clerical work. Secondly, it had to be relevant – the assessments were to provide the information most useful to pupils, parents, teachers, and employers. Thirdly, it had to be just. It had to recognize a wide range of relevant achievements for all pupils in all areas of school life, making no assumptions about more or less important achievements or subjects. Being good at woodwork or helping in a playgroup would be achievements recorded and valued as the important qualities they undoubtedly are, as relevant for some vocations as physics is for others. And, they felt, only teachers could provide such assessments. Teachers have a rich fund of knowledge about pupils with many and varied insights depending on the type of contact and activity they engage in with the pupil. Such knowledge, however, is rarely collected systematically but is all too frequently passed over in favour of an overall percentage mark or grade and a terse comment, 'Could do better'.

The working party felt that such 'terminal' assessment is not helpful for guidance purposes. It does not help the pupil himself or his parents or his guidance teacher to isolate areas of difficulty or promise. Nor does a single mark tell the employer what he most wants to know. So the notion of a *profile* assessment system was adopted which would allow teachers to contribute their varied knowledge of pupils in a structured way. The independent assessments for each individual pupil by each of his teachers could then be collated into an overall picture of a pupil or 'pupil profile'. Such detailed pictures of a pupil produced perhaps twice a year would provide for comparisons of a pupil's achievements in different

subjects, his general strengths and weaknesses in learning skills, and give some insight into the affective factors influencing his progress. This series of frames from the film of continuing, largely subjective, teacher assessment would culminate in the leaving report, on which would be reported the whole range of the pupil's achievement in school.

Development and evaluation

These aims and the assessment procedure into which they were translated became the subject of a development and evaluation study funded by the Scottish Education Department and carried out by the Scottish Council for Research in Education.* An initial feasibility study and subsequent field trials in a variety of Scottish secondary schools were initiated. Guidance for teachers making the assessments was offered in the form of subject guides prepared by panels of teachers. These guides were designed to help in defining the various skills, achievements and characteristics, and in setting appropriate standards for the five-point scale used. The problems which arose during these field trials in the schools formed the basis of development and refinement of the procedure. All aspects of the procedure – its aims and content, its reliability and validity, and indeed its justice, relevance and practicability – became the subject of enquiry.

Statistical analysis revealed those aspects of pupils which could be reliably assessed. It revealed, crucially, that teachers could and did 'profile' by giving pupils different grades for different aspects of performance. It provided the basis for revision and refinement in answering the question what *could* be done. What *should* be done – an even more fundamental question – was the subject of extensive discussions with interested parties – the teachers involved, pupils' parents, employers, colleges.

Some reactions

The reactions of those consulted overwhelmingly endorsed the aims and concerns that had led to the setting up of the research. Although teachers foresaw some practical problems, such as the time involved and, in some subjects, knowing the pupils well enough, they welcomed a move to overcome the inadequacies of existing external examination certification. Teachers felt that the school should give every child a leaving report and that the school's concern extended beyond academic achievement to social and personal development. Teachers with a particular pastoral responsibility for pupils felt that this new method of collecting teachers' knowledge of pupils would improve communication about pupils within the school, with the pupils themselves, with parents, and with outside bodies. Pupils too welcomed the idea of a leaving report and the provision of this more detailed 'profile' of their progress. They welcomed assessment that would be not only continuous and cumulative, personal and

* A full account of this study is available as *Pupils in Profile – Making the Most of Teachers' Knowledge of Pupils*. Hodder and Stoughton, 1977.

academic, but which would be open so that they could react to it and know where they stood. Parents and employers too, were united in their desire for more detailed and relevant reports on pupils covering a wide range of characteristics. These discussions added to the practical development work of the school trials and formed the basis of the refined version of the procedure now commercially available as the Scottish Council for Research in Education Profile Assessment System.*

The Profile Assessment System

The procedure now allows for teachers to enter on a class assessment form their knowledge of pupils' oral and written skills, visual, numeric and motor skills, on a four-point scale. It allows for assessment of enterprise and perseverance – two work-related characteristics shown by research† to have high predictive validity when assessed by teachers. Blank, optional assessment categories are provided to be labelled as appropriate for each activity. All the assessments made by each teacher for a pupil are then collated either by computer or by the manual system developed in the research to form a pupil profile. The leaving report is a condensed summary of this information and provides a description of the pupil's basic skills, his personal qualities (only positive information is included), his involvement in formal and informal school activities, as well as a more traditional rating for subject achievement. Ideally the procedure would be adopted on a regional or district basis so that some kind of inter-school moderation could be applied to the graded aspects of the assessments.

The way forward

It would be unrealistic to pretend that this procedure has solved all the problems of assessment and certification inherent in compulsory secondary schooling. It does, however, reveal a way of providing positive and useful assessment for all pupils. An assessment which will help them to know themselves; an assessment which recognizes the value of a variety of different and worthwhile achievements; an assessment which is indeed practicable, useful and just.

---

* Sample packs of materials are obtainable from Safeguard Business Systems, Loomer Road Industrial Estate, Chesterton, Newcastle, Staffs ST5 7PZ. Free explanatory leaflets and instruction manuals (£0·50) are available from the Scottish Council for Research in Education, 16 Moray Place, Edinburgh EH3 6DR.

† Hope, K. Merit. *Advantage and Deprivation in Scotland*, unpublished manuscript, 1976.

Art education in the primary school: the need for new approaches

JOHN A. WILLSDON

Senior lecturer in art and craft and executive officer of the Language and Reading Centre, South Glamorgan Institute of Higher Education

What place should be given to art in the curriculum of the primary school? Are teachers adequately prepared for art teaching and do they adopt the right approach? Or does the present approach to the teaching of art need reassessing?

The art curriculum of primary schools has already experienced several reforms in this century, some as a result of the influence of Cizek, Marion Richardson and others, some because of the availability of new materials, and others because of changes in educational philosophy. But although some fine work has emerged over the years, the present situation is far from satisfactory. Many teachers feel inadequately prepared for art teaching, some schools do not bother with it at all, and some children are convinced that it holds nothing for them either because they lack ability, or have lost interest, or because they are tired of 'expressing' themselves to no apparent purpose. Remarkably few children seem to reach the top of the primary school with any genuine enthusiasm for the subject, not least in the sense of regarding it as a valid and relevant means of interpreting and imposing form on experience.

The rationale behind contemporary practices is an implicit assumption that art is essentially a practical subject with the belief that in *making* art the child will achieve both personal development and aesthetic sensitivity. A common methodology is that of 'free expression' and 'discovery' with direction by or interference from the teacher being kept to a minimum.

Whatever the advances gained by the earlier reforms, there can surely be few subjects that stand more in need of a really thorough overhaul than art in the primary school. A vast amount of time, effort, and money continues to be spent on it without a commensurate return on the investment. The present problems are multidimensional, and it is perhaps worth noting some of the more obvious and pressing needs:

a re-examination of the sources for objectives, and a redefinition of which objectives are most worthwhile and desirable;

a specification of what children ought to know, and what skills and attitudes they ought to acquire;

an identification of developmental stages in so far as they relate to practical and theoretical art studies;

an understanding of the psychological processes in creativity and their implications for art teaching and learning strategies;

information about the nature of individual differences in artistic and aesthetic development;

an assessment of the place of direct instruction as opposed to unstructured and undirected experience and activity; and,

an acceptance of the viability of evaluation in art education.

Among the most difficult of the problems are those relating to research, for here there has tended to be a lack of interest in art education as such, and in applying research techniques to what are generally regarded as intuitive and creative activities. The polarization of rational and intuitive approaches in art is, of course, age-old, and the results of each when pursued to the exclusion of the other have been apparent in art education for many years.

Another problem is the relatively unchallenged conviction in art that what should be taught, and how it should be taught, can be determined by reference to the subject alone. Despite all the work done elsewhere in the curriculum in terms of teaching and learning methods, art as a subject has often remained remarkably untouched by pedagogical developments. This is possibly due, in part at least, to the fact that the period of initial teacher training has not, on the whole, provided the non-specialist majority of teachers with a base of knowledge and experience in art sufficient to enable them to work and experiment in the subject with confidence and insight.

Reforming the art curriculum

The child and the subject, though they are not the only factors, must nevertheless be central to any consideration of reform. There is a vast amount we ought to know, and don't know, about children's artistic and aesthetic development. At what stage, for example, does the direct and spontaneous work of young children become less a symbolic statement and more an end in itself, pursued for aesthetic purposes? Is the marked decline of interest in art as an activity in the upper part of the junior school due to innate factors in child development, or to the kind of art education given in schools? Is there such a thing as 'readiness' in art? For example, are some ideas such as volume and movement more difficult to understand than, say, texture? Are spontaneity and instruction mutually exclusive? What is the significance of individual differences in terms of perception, motor coordination, skill, fantasy, imagination, and inventiveness? Is there a hierarchy of skills and concepts that needs to be heeded in selecting objectives? If the present shambles that passes as art education is to be tackled effectively, it is quite clear that

there is a need to explore the complex relationships between the child's perceptual, motor, cognitive, and affective development on the one hand, and the vast field of material in art and aesthetics on the other.

The language of art

A common view of the content of art teaching is that children should learn the so-called 'language' of art – form, colour, line, texture, pattern, and design, for example. In this there is an inherent, and unwarranted, assumption that it is western art (especially that of the last two centuries) which provides the most appropriate model for this language. A second, and complementary view, focuses on materials – an ability to handle them, to acquire a feeling for their properties, and to find in them a stimulus for ideas. Others would stress the importance of acquiring technical skills, or the need to initiate children into an awareness of the cultural heritage of artefacts, paintings, and buildings.

This same language conveniently ignores unfashionable ideas such as conventions in perspective, composition, volumetric representation, and proportion. A case might be made out for adopting a language of this kind if the *making* of art was seen to be the primary purpose of art education, but such a restricted view is in itself suspect, not least because it is mainly responsible for the present unsatisfactory state of affairs.

At the heart of any curricular reform in art must surely be a concern that children should become aware of the instrumental and formative roles of art – art in terms of expression, exploration, communication, therapy, and aesthetics; art as a vehicle for, and an embodiment of, man's needs, interests, feelings, worship, and entertainments. It is in this richer field of the roles of art that we should seek for some of the principal objectives, as well as the knowledge we wish children to possess. From such sources we can select the material which leads to a really meaningful 'language', one which deals with significant and key concepts such as economy of statement where complexity is reduced to simplicity, the symbol as ideograph, conventions and formulae in representation, and the determinants of form, for example, the properties of plasticity and rigidity.

It is hardly necessary to emphasize the ample scope for a variety of teaching techniques and strategies in this broader approach because it is suggestive rather than prescriptive. In terms of content and supportive materials, it would provide a stimulating challenge to the art educator as well as to authors and publishers.

Does this mean that there is to be no place for making art for its own sake in the primary school? Is that not also a worthwhile and desirable objective? Quite clearly it is, but not to the point as at present where it is more or less to the exclusion of much else that is important. A suitable provision for personal development can take its natural place within the larger scheme, and as a purposeful and deliberate component of it. This would help to resolve some of the

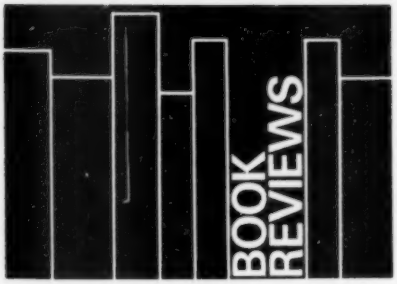
current difficulties in introducing, sequencing, and integrating personal work in art so that innate interests, abilities, and predispositions can be cultivated, sustained and developed.

Evaluation

No art curriculum can ignore the process of evaluation, and the objectives of this wider approach are no more difficult to specify and evaluate than are those in other parts of the curriculum. Yet the mere mention of evaluation in art rouses a barrage of objections which dwell on the supposed impossibility of applying rational procedures to intuitive, creative work. Now, if a creative act, in the sense of it being innovatory or inventive, for example, is dependent on a process of information collection and sorting, then it is abundantly clear that much child-art makes little use of such a process since one of the characteristics of child-art is spontaneity. Children do display associative powers and propose unconventional solutions, perhaps mainly because fantasy has its own reality in childhood. As for intuition, its potency in art appears to be restricted to a few form preferences with children. It is suggested here that there are qualitative differences between children and adults when it comes to creativity and intuition. Research, however, might indicate ways in which the curricular schemes of art could be designed to allow for both the process of creativity, and for subconscious states, to influence children's work, whether practical or theoretical. There is virtually no provision for this in the prevalent and haphazard 'express yourself' kind of lesson.

It would, of course, be a manifest nonsense to claim that all art, any more than any other subject, can be reduced to a collection of words and statistics. Built into any good art programme, however, must be some means of evaluating not only the skills and knowledge acquired, but also the extent to which creative and intuitive processes have been fostered and utilized.

The enormous potential for cultivating in children a lively awareness of art as a pervasive and influential force in human experience has been largely neglected in the selective pursuit of art-making activities, whose relevance to the needs and interests of children is often questionable. In a rapidly changing and multiracial society such as exists in Britain, the curriculum development movement has created opportunities for a constructive review of the whole field of art education in primary schools.



Developments in geography teaching

Philip Boden

Open Books £3·90 hardback, £1·70 paperback

This book is an addition to *The Changing Classroom* series edited by John Eggleston. Philip Boden, who is Senior Lecturer in the Department of Education at the University of Keele, analyses the present situation in geography and reviews the prospects for the new elements in the changing geography curriculum.

In Part I, 'Present Practice and Prescription', he deals with the present trends in organizing the subject material, the way in which geography is learnt and the way in which geography stands in relation to other subjects through integrated work, combined studies and so on. The reference to types of knowledge, learning and additudinal development based on Bloom is particularly useful. Perhaps more could have been made, however, of the translation of broad scale aims into definable learning objectives, and the relationship of these to the problems of assessment and scheme construction. Part II, 'Innovation in Action', presents accounts of the working of Schools Council projects in schools and a description of the Joint Matriculation Board's new A-level syllabus B, as examples of external influences on curriculum innovation in geography. To this is added an example of school-based development, based on a third year urban studies unit.

It is a pity that in this is section there little attempt to draw pertinent generalizations or to assess the role of such agencies in the innovation process.

The final part, concerned with future change, deals rather briefly with themes such as scientific method, systems, regional predictive studies and geography for the future. This is perhaps the least successful part of the book, which otherwise provides an interesting but rather disjointed look at a variety of current developments. This is a book that will be useful to teachers in training and to the well-informed general educationalist.

B. P. FITZGERALD

The development of reading

Frank A. Spooncer

Hodder and Stoughton 0·60p paperback

The evaluation of reading

Frank A. Spooncer

Hodder and Stoughton 0·60p paperback

The aim of these two pamphlets is to present teaching material to students at college level in the form of work books which with the reference material quoted provide a basis on which personal notes can be made.

The Development of Reading is ambitious in its aim to present within thirty-two pages a developmental view of reading from pre-school days to adulthood, encompassing within this aim 'the skills of reading at all stages of education; the strategies and schemes involved in the teaching of reading, including a consideration of method, medium and materials; the organization of reading in schools; reading difficulties, and the organization of remedial treatment'!

Inevitably, the book is synoptic and the depth of coverage is limited, but the range of references quoted is considerable and should facilitate further study. It is unfortunate that there is little if any acknowledgment of the place of the spoken word in the process of learning to read or of the pleasure and wonder

which children can experience from ideas, both factual and imaginative, which a growing mastery of reading and access to attractive books can bring them.

The danger is that the young teacher reading Mr Spooncer's book may envisage learning to read as inevitably a hard grind, a taxing course punctuated by the ritual hurdles of lower, intermediate and higher order skills, and thus may miss the vital point that what is needed is not only understanding of the necessary techniques but also skilled and inspired teaching which will help to encourage children to want to read and therefore to work at it.

The Evaluation of Reading sets out to examine the assessment of the attainments, progress and skills in reading of the individual, and the evaluation of methods media and materials available for helping him. There is a review of standards and progress in reading and finally a section on the assessment of reading difficulties and on remedial reading.

Again, the booklet brings together much useful information about techniques and methods, but although there is a reasonably full analysis of problems and remedies, the real problems do not always emerge clearly because of the technical language used. While it is with some sense of relief that one passes from the aridity of: 'An attempt at an objective criterion is made by readability formulae, which usually takes into account factors such as sentence length, proportion of unusual to frequently used words, or number of one-syllable per hundred words' to the statement 'readability can also be assessed informally', it might have been profitable also to explain in simple language how attractive books of many kinds and not merely from reading schemes can be used to help children who have to be encouraged if they are to read at all.

Students who have mastered these two little books will at least know where to turn for further help with their problems in teaching reading. As they teach they will, hopefully, communicate to their children glimpses of the free, untrammelled world of words and books which exists quite independently of the paraphernalia involved in being taught to read.

C. A. NORMAN

Case studies in classroom management

David Galloway

Longman £2·25 paperback

This is a welcome contribution to the training of teachers at both initial and in-service level. The case studies deal with the problems of children with learning difficulties in the ordinary classroom, and raise practical issues of the management of such cases. The areas covered include testing and assessment, relationships with the school psychological and medical services, teacher and parent communication, and the classroom symptoms of long-term emotional distress and acute anxiety. Each case study is preceded by a helpful summary of issues, and ends with questions to guide discussion.

The case study is still one of the most useful tools to lead students out from specific examples of classroom behaviour into the theoretical understandings necessary for their professional development. Unfortunately, many users of case studies are insufficiently skilled to move beyond the anecdotal nature of the material itself. My only criticism, therefore, of David Galloway's excellent book is that it contains no words of guidance for the lecturer on its best use.

PAULINE PERRY

The craft of teaching

Kenneth E. Eble

Jossey-Bass £8·65 hardback

This contribution from the United States is a direct and refreshing attempt to look at the day-to-day problems in a lecturer's working life. In a realistic and

sympathetic way, the key issues in the practice of higher education teaching are stripped of their mystique and objectively assessed. In a field where few practitioners have any formal training for their craft, any contribution is welcome, and this book is an excellent and helpful summary of Professor Eble's experience as director of the Project to Improve College Teaching, sponsored by the American Association of University Professors.

I would recommend the book to every lecturer who has to decide how to teach, how to assign work done privately, how to assess, how to examine, how to reconcile the conflicting demands of teaching, research and administration. I would recommend the book to any lecturer who cares enough about the teaching part of his or her job to be curious about the teaching and learning process. Once the lingering strangeness of American terminology has been overcome, the experience and advice are immediately relevant to the UK situation.

Harsh as are some of Professor Eble's accusations towards his fellow academics, they present a challenge which may need an answer on this side of the Atlantic as well as on his. His challenge is best illustrated by the following quotation: 'Perhaps what teachers need, as much as attention to the craft of teaching, is more meditation on those character defects to which the academic person is prone. Blindness of one's own making describes many defects: blindness to the personal needs of individual students, blindness to a discipline's place in the whole of enquiry and learning, blindness to the university's place in the world, blindness to the necessity of being scholar and teacher and citizen of a community, blindness toward our ignorance and our vanities, blindness to the importance of vision in teaching'.

Or, to put the challenge in more positive terms, 'Surely virtue is necessary to great teaching. All teachers can have the opportunity for opening up worlds'.

PAULINE PERRY

The organization and impact of social research

Marten Shipman

Routledge and Kegan Paul £3·25 paperback

'Human stories behind famous research projects' might convey, only just too sensationally, the purpose but not the tone of this revealing and serious book. Six authors of important reports were invited to reflect on the 'personal and professional influences' on their projects.

J. W. B. Douglas recounts the strain of sixteen years to 1962 without secure funds for the National Survey. R. R. Dale portrays the vagaries of chance conversation and ill-health during the twenty-year gestation of his work on single-sex and mixed schools. The Newsons describe the interplay between parenthood as they experienced it, their own training in psychology, and their early research into child-rearing with its pioneering taped interviews. Personal involvement of another kind was frankly declared by Ford in *Social Class and the Comprehensive School*, where she reported, with admitted regret, that the schools she studied could not be shown to contribute to a fairer society: the subsequent misuse of her evidence to support opposed value positions was manifestly exasperating at the time, and is recollected here in cheerful, alienated untranquillity. Barker Lunn offers a studied account of the meticulous development of special tests and scales for 'Streaming in the Primary School', and the careful weighing of different means of analysis. Lacey gives more of a professional autobiography, stressing his personal motivation for the 'Hightown Grammar' and subsequent work, and he expounds the tensions inherent in introducing a partly anthropological approach in observation.

All the authors say much more, both about their methodology and about their disappointments, hopes and fears. They provide Shipman's concluding chapter with ample illustration of his theme that personal and professional circumstances do influence research activity in unreported ways. Shipman does not press a case for including a statement of these

influences in every published report, though he calls for a new look at the conventions of reporting. He does offer a rare insight into the anxieties and uncertainties of research life, and a salutary reminder of difficulties and constraints we too often take for granted.

A. GIBSON

The growing brain: childhood's crucial years

John Brierley

NFER £3·55 paperback

Everything we do and think and everything we learn and feel, is initiated by, or monitored through, the central nervous system. The brain is the receptive, coordinating and executive centre of this vast neural network: the organ of mind, of sensation and action, thoughts and emotions. It is the most complex and marvellous of organs, and our knowledge of how it works is not great. We do, however, know something – and that knowledge influences the way in which we think not only about perception, cognition, learning, feeling and emotion, but also about action and conduct. And most important, our beliefs about the way in which the brain grows and the mind develops influence the manner in which we regard children, the tasks we set them and the expectations we have of them. If we think of them simply as little adults we will treat them as such – to their cost. If we programme out strategies of teaching logically as though for a computer and not *psychologically* for a developing organism, we will again fail to teach effectively. The study of the growing brain is also a study of the process of development.

John Brierley is an HMI whose special field of interest is human biology. He has written this book about 'children's crucial years' to give parents, teachers and student teachers a basic knowledge of the nature of the brain of the child and to put this in an educational context. The idea is a good one and the major points that the author makes throughout the book and summarizes in his introduction are the right ones: people are genetically unique; the physical growth of the brain occurs very early in life; good nutrition is crucial; though children deprived of adequate intellectual stimulation in infancy may catch up later, the early years are nonetheless much more significant for later development than was realized until recently. Brierley stresses the importance of language, has some controversial points to make about sex differences, and discusses the role of mothering and stability. He describes the vast 'uncommitted' areas of the brain upon which are written and stored the lessons of experience which are tested out by the child and modified by practice and his own experience of reality as it impinges on him.

All this is very good. However, though the emphasis is right and the book contains a great deal of useful information, it is not in my judgement a complete success. The writing is sometimes very dull; it fails to capture the excitement and wonder of the subject. Too often experiments are referred to rather than described (for example, on p. 117, the strikingly imaginative and illuminating studies of Harlow and his colleagues are made to seem pretty ordinary and rather heartless; and the ingenuity and importance of the development of amniocentesis hardly emerges from the prosaic description given on p. 128).

The psychological and educational judgements made throughout the book are for the most part substantiated better than are the more strictly biological sections, and I don't think the author really succeeds in resolving the problems of how to relate brain 'models' to the world of behaviour. In other words, his educational judgements stand or fall on their merits and get less support from findings from brain research than Brierley would have us believe. The sections of the book dealing with anatomy, physiology and growth are thus the best parts of the book. I have serious reservations only about

Brierley's use of the Dutch famine material which he cites to make the point that the foetus appears to be protected from bad nutrition. The fact is that babies born during the Dutch famine were on average of about the same birth-weight as British singletons born a decade later – and there were very few premature babies brought to term during that appalling period. We cannnot therefore from this study make any comment on the relation between maternal nutrition during pregnancy and the child's birth weight—and much other evidence indicates that maternal diet *is* important to the developing foetus.

The Growing Brain would be a useful addition to the school library. It is no substitute for books on developmental psychology and education many of which cover some of the same ground and do it rather better. But for students of biology – and that *should* mean all of us – it gives an introduction to recent work on brain and its development which is written to meet the needs of people with no prior knowledge.

JACK TIZARD

Developments in art teaching

Terence Wooff

Open Books £3·90 hardback, £1·75 paperback

'This book is intended to give an outline indication of factors and ideas currently influencing the teaching of art and design in primary and secondary schools and to offer some pointers towards future development in art teaching. . .'

It is written for the non-specialist teacher, students in training and the layman. A selection of examples of the teaching processes in a variety of situations from those encountered in the infant room to the subject at sixth form level will also be of interest to many specialist art teachers, whose experience, of necessity, tends to be concentrated on relatively few schools usually in one phase of education.

A significant factor in the art teaching process, particularly within the growing middle school area, is the use of teachers as art and craft consultants and specialists although their background qualifications and personal expertise may be slight. For these, as for any art teacher who is in any way endeavouring to evaluate his role in relation to the pupils and their work, the discussion which takes place in this book will be of considerable value. In saying this, one is conscious that nearly all pre-secondary teachers are responsible for teaching 'art' of some form at some stage. Among the interwoven structure of the influences on the teaching of art are many statements which will lead the non-specialist teacher to a deeper understanding of the nature of art education and some of the reasons for its failures as well as its successes.

This is a hopeful book presenting an encouraging future if art teachers are aware of their differing roles, concerned, as they are with different phases. The point is fairly made that, in order to take this area of work forward at a time of constraint, there is a need for coherent justification within the context of any claims made and for any intended developments.

PETER ENTICKNAP

Developments in social studies teaching

Denis Gleeson and Geoff Whitty

Open Books £3·90 hardback, £1·70 paperback

'Social studies' has meant many things: perhaps an undemanding course in safe and descriptive civics to motivate or occupy the 'less able', or sociology of varying degrees of rigour, or even general humanities courses claiming to 'integrate' the orthodox disciplines. Having started by offering the first style (i.e. of unstructured civics) this area of curricular activity has still to shake off its past reputation for softness. Recent developments have, regrettably, not eliminated previous and less valuable forms of social investigation. However, to regard this activity as axiomatically lightweight is to commit a very

foolish error. The authors of this lucid and condensed work, which covers a great deal in its 120 pages, survey the chief developments in social studies, and outline the continuing problems.

The 'new social studies' movement brought some hard thinking abont structure and content, for example in Lawson and Dufour's eponymous work on the subject, or through the questions posed by Charmian Cannon as early as 1964. For these and other reasons, such as the secular growth of examination courses in secondary schools, a 'sociology-based' form of social studies grew quickly. This in turn ran into criticism for being a new orthodoxy, too positivist in approach and seeking to present a simplistic picture of society as a set of self-evident truths, acceptable because it did not stimulate awkward questions. Social studies offered in this way will not enable people to understand society, let alone change it – the criteria of correctness held by the latest critics.

The authors survey all these changes fairly and clearly, presenting a balanced case and not attempting to disguise their own preferences. At the same time, the book minimises some important considerations. First, 'social studies for action' will always run into strong opposition, a fact worth bearing in mind in these days of debate about the content and management of the curriculum; the authors touch on this opposition but do not analyse it in depth. Secondly, the welcome professional debates about the nature of social investigation need to be related more consistently and clearly to the psychological development of children. Thus whatever ethnomethodologists and phenomenologists may argue about, the central question for teachers is what, of all this, can be taught and learned? This final point suggests a caveat for readers: some prior knowledge of current methodological debates in the social sciences is necessary if the first section of the book is to be fully comprehended, although most humanities teachers will find the remaining two-thirds a useful summary of the present state of play and some future possibilities.

R. A. S. HENNESSEY

Developments in early childhood education

Janet Lancaster and Joan Gaunt

Open Books £3·90 hardback, £1·70 paperback

One of a series of books with the theme of the changing classroom, edited by John Eggleston, this book seeks to review recent developments in early childhood education. The writers have included references to the latest material, touched upon sensitive areas of discussion, and described a wide range of classroom organization and practice.

The early chapters are devoted to a simple and clearly stated review of the historical development of early childhood education, with reference to many of the early pioneers in this field. The influencing factors of the past century are discussed, bringing the reader to many of the more recent and present day practices which have their effect upon this sector of education.

The reader might be deterred by these early chapters and the somewhat prosaic official way in which they are written, but the effort of reading them is rewarded when reading the more immediately interesting parts of the book devoted to classroom practice and curricular matters.

There is a realistic evaluation of the more informal approach to education: the need for structure, the wide range of skills needed by the teacher, the involvement of parents in the school, and the school in the community, are given due importance.

The writers show a clear understanding of children's language and the role of the teacher in the development of linguistic ability. The need to create a stimulating environment, and the need to 'strike a balance between helpful promoting and interference', and the inherent dangers of intervention that is not sensitive and thoughtful, are well

illustrated. The chapters on play, using the environment, and creative and aesthetic experiences, make many interesting observations and should prove helpful to all teachers of young children. Throughout the book, the need for an underlying planning and an understanding of child development is continually reinforced, and the presence of such planning and understanding in many classrooms is accepted.

The book covers a very wide spectrum of historical, social and legislative background information, together with an assessment and interpretation of present day practices, and perhaps because of this wide range there is sometimes a lack of involvement with the subject in the haste to move onto the next aspect to be covered.

The young teacher, and the more experienced teacher wishing to modify her approach, would do well to read this informative book which illustrates many of the best facets of current good practice.

B. STANILAND

Moral and religious education in county primary schools

H. Blackman

NFER £2·10 paperback

This is a report to the Social Morality Council by a working party that included eight London teachers and represented many different religious and non-religious points of view. This multi-faith viewpoint makes it a particularly important and useful contribution to discussion about moral and religious education. The preface speaks of some delay in publication and from time to time the reader is aware that the original papers – the six chapters still bear the characteristics of separate papers – were probably written some years ago. The suggestion in the chapter on religious education that the resources available to the teacher are 'still somewhat scattered and thin on the ground' is unfortunate and it is a pity that the list of sources at the end was not updated, at least to include some mention of the major religious education resource centres. However, the collection as a whole has the merit that its views about moral and religious education, described respectively in the now familiar terms of individual moral autonomy and the 'open' approach of 'the new RE', are set firmly in the context of its ideas about primary education in general and that it hopes for a contribution to both from all the areas of the primary school curriculum.

JOHN GOULDING

Developments in English teaching

Michael Saunders

Open Books £1·50 paperback

Language, schools and classrooms

Michael Stubbs

Methuen £3·00 hardback, £1·40 paperback

Language across the curriculum
National association for the teaching of English

Ward Lock Educational 0·60p paperback

Language and language teaching: current research in Britain 1972–1975

Centre for Information on Language Teaching and Research (CILT)

Longman £6·25 hardback

The volumes by Saunders and Stubbs appear (as publications in two different series, both edited by John Eggleston) to reflect the accelerating shift of emphasis in schools towards a conceptually-based concern with the processes of English teaching as distinct from a content-based preoccupation with the secondary syllabus. In *Developments in English Teaching*, Saunders conscientiously traces the typical development of secondary English over the past thirty years before describing, in part II, the work going on in three identified comprehensive schools. A post-Bullock survey of the recently completed 'Writing across the curriculum' project is followed by brief chapters on drama, educational publishing, and 'key issues'. It is understandable that part I explicitly contrasts the 'progressives' progress' with the 'traditionalists' tradition' and this is done very fairly though without ambivalence (Mr

Saunders is a 'progressive'). There are two features of the book which are, in my view, commendable; examples of practice are adduced in the three very different schools and there is a wide range of relevant reference.

In *Language, Schools and Classrooms*, Michael Stubbs recognizes that in any popular sociolinguistic treatment, a clearing of the theoretical background is necessary. He does so by devoting much of the first half of the book – 67 of the 117 pages – to the Bernstein-Labov controversy. This allows him to state, firmly but fairly, that it is time to have done with the pseudo-problem of language deficit and, while recognizing that 'sociolinguistic breakdown' often occurs, get on with the business of looking at ways of studying the language used by teachers and pupils. The rest of the volume does just that. After a section on the need for studies of classroom language, Mr Stubbs presents, in chapter 6, a valuable survey of studies undertaken, concentrating – in my view, properly so – on Sinclair and Coulthard's model for the analysis of exchange structures and then, on the more general sociolinguistic approach of Walker and Adelman. The penultimate chapter, on the 'hidden curriculum', contains comment and insight into the relationship between linguistic and cognitive processes which take us well beyond the disappointingly slight *Language Across the Curriculum Guidelines* published by the National Association for the Teaching of English (NATE) which, in its anxiety to reach classroom teachers, has produced a rather unbalanced document in its heavy, if predictable reliance on NATE and Schools Council thinking. The need for more research is apparent. That it is going on is evidenced by the very necessary reference volume published by the Centre for Information on Language Teaching (CILT) on *Current Research in Britain* 1972–75, a second edition of a work which every educational administrator, adviser, or academic needs to have at hand.

PETER GANNON

Developments in modern language teaching

Colin Wringe

Open Books £1·50 hardback

Language teachers, students in training, and indeed all those whose business it is to promote successful foreign language learning, will welcome this concise and well-informed analysis of current trends in the teaching of modern languages. Within the space of 127 pages, patterns of organization, examinations, teaching methods, and the use of audio-visual and audio-lingual aids are all considered in the light of the author's experience and observation of work in English schools and colleges.

Four case-studies are included to describe the teaching of French in a primary school, the use of group work in mixed ability classes in a new comprehensive school, a course in European studies containing a substantial element of language work, and the modern language department of a sixth form college. Some useful pedagogic advice is offered and possible pitfalls that await the unwary teacher are identified: 'Surely there is no greater fallacy than that time given to oral work is time taken away from proficiency in writing the language, and therefore from good examination results'. The importance of using the foreign language as the medium of instruction is emphasized and it is in this area that the author sees the greatest scope for teachers 'to increase the profession's stock of skills and techniques'. An admirable feature of this book is its happy blend of realism and optimism.

M. R. WIGRAM

Education and the urban crisis

Frank Field (Editor)

Routledge and Kegan Paul £3·50 hardback, £1·75 paperback

This book is the enlarged statements of a group of contributors to two Gulbenkian conferences on education and the urban crisis. The contributors are notable figures in economic, social and educational developments with partic-

ular interest and experience in the inner city. The quality of the contributions to a large extent overcomes the difficulty of producing a readable document from a series of statements which are at times contradictory and leave the reader, who may be looking for a consensus to support action, somewhate confused. Nevertheless, there are threads of agreement and some priorities for statutory and voluntary organizations to consider.

That the inner cities are in trouble, there can be no doubt from reading the very thorough analyses which describe the factors which lead to urban decay and abandon, in the centre of cities, a concentration of those members of society who face the greatest difficulties in achieving reasonable jobs, reasonable housing and, perhaps as a consequence rather than a cause, reasonable education. Although the sense of 'crisis' in this situation is heightened by various contributors, David Eversley does not see catastrophe if the 'crisis' is not resolved, merely a prolongation of unacceptable conditions. In today's social climate and with the American experience, which is referred to in the book, that may be complacent as the overall social implications are likely to be determined by the intensity of the problems, and not their numerical extent.

We are given an account of the Government's responses, already well documented, which in the main is a description by A. H. Halsey, Frank Field and Stephen Jessel of the various government projects such as Urban Aid, Educational Priority Area projects and Community Developments projects. It is in this section that one has doubts about the value of the book for the layman, or even those who have less than a deep professional commitment to inner city issues because of the assumptions that are made about previous knowledge. This is inevitable I suppose when reporting relatively short statements, but the support of the layman would appear critical if the political will to act is to be influenced. This is followed by a description of inner city schools which is at once totally depressing, as portrayed by Alan Little and by edited transcripts of some pupils' statements, and optimistic because of falling rolls and increasing staffing stability, as portrayed by Peter Newsam.

Perhaps the two major educational issues that run through the book, about which there seems to be a fair measure of agreement, are the need to develop community schools and to provide a more relevant form of vocational training and careers guidance.

Community schools are seen to have a much deeper commitment and involvement in their locality than is normally the case and would involve contributions to the schools' work from many different agencies and bodies including employers and parents. Parental involvement emerges as an issue, although there might be a surprise in store for some of the contributors if they are to allow the community a major influence in what is to be taught and how it is to be taught. It may be that the inner city parents would choose a content and methodology which has basic skills as the main aim in the way that Alan Little suggests rather than see the teacher as a 'social explorer' with all the curriculum implications, as Eric Midwinter proposes, although the latter is not a view that is developed very far in this book.

Perhaps the most valuable practical contribution is Nicholas Gillett's article on 'Schools and the labour market' in which he outlines various approaches to vocational training and careers guidance within the general curriculum, as well as raising novel suggestions about teacher training. He sums up his piece with 'They (the implications) include the selection and training of teachers to be able to adapt to school leavers without qualifications on the one hand and to employers on the other, and who can organize work experience schemes within a framework of community education without damaging their career prospects'.

In general, the book is better on

social descriptions than educational solutions but there are some interesting examples of small projects supported by various charities such as a Young Person Development Adviser to a Coventry school. Eric Midwinter suggests a training agency but whom it would train and what it would teach is left vague. Peter Newsam seeks the dissemination of good practice, but that would require much greater direct local authority influence than we have seen in the past. However, the suggestion that looks most interesting is that a small area should be deliberately economically and socially reinvigorated as an experiment to be extended if successful. This would support the consensus in the book that the basic problems of the inner city are interrelated and centred on income, education, employment and housing, although differing emphasis is put on the relative importance of these factors by the various contributors.

P. SINGH

Developments in design education

John Eggleston

Open Books £3·90 hardback, £1·75 paperback

This book is one of a series of practical guides to recent innovations in teaching under the general title of *The Changing Classroom*. Professor John Eggleston, the author, is general editor of the series. Professor of Education at Keele, Eggleston is well known in design and craft education circles for his work in connection with the Schools Council project under that name. Predictably, the book follows closely the philosophy of the project and a number of teachers connected with it make important contributions. For the teacher of the subject the book is, therefore, a useful summary, as indeed it is for those outside the field who wish to gain an insight into current practice. Of particular interest are the five case studies of widely differing projects. For those closely associated with developments in design education Professor Eggleston's thoughts on the future of this work in schools are challenging: 'Without developed competence, sensitivity and skill the individual can have no effective power to influence events and no real satisfaction. The school curriculum does not necessarily offer these things; indeed it has been argued that, in the past, it has provided them only incompletely for a small minority of students. But the possibility that it could do so more fully and more widely is now a real one. The thesis of this book is that design education can play a leading part in achieving this possibility. Such an aspiration constitutes the future of design education'.

J. L. SWAIN

Worlds apart: reading for a sociology of education

J. Beck, G. Jenks, N. Keddie and M. F. D. Young (editors)

Collier Macmillan £7·50 hardback, £4·75 paperback

This book, of 568 pages, is a collection of readings from novelists, anthropologists and philosophers as well as sociologists, but the common thread is that they all support the editors' scepticism of the categories and concerns of conventional sociology of education. The sociological tradition which attempts to discover common patterns of human behaviour is thrust aside. Instead, there is an emphasis, more usually associated with historians than sociologists, on the uniqueness of situations, and sociology is seen as a theorizing about the possibilities of changing the particular social contexts in which men find themselves, so that new potentialities are realised.

The extent to which this new sociology criticises the research tradition in sociology since the Second World War may be seen from the following list of categories which come under attack in this book. Concepts of ability and achievement, the disciplines of knowledge, cultural transmission, the functions of family background and social class, restricted code, cultural deprivation and compensatory education, are all seen more as the norms of researchers than as descriptions of reality.

Not all of the readings are of equal

value, but, as a whole, they provide an inviting stimulus to critical thinking about the assumptions underlying education. Of course, the editors' own assumptions are, by their own argument, the product of the particular social reality which they have constructed, and consequently are no more absolute than the views of others. As the editors claim, they offer their way and 'not *the* way'. Nevertheless, for theoreticians they have brought together a convenient collection of stimulating essays. For practitioners, however, who may be looking for answers or guidelines, there is little comfort here. Sociology, whether new or old, remains a 'theorizing about our world'.

D. W. SYLVESTER

Developments in mathematics teaching

F. R. Watson

Open Books £3·90 hardback, £1·75 paperback

A dozen books with titles '*Developments in . . . teaching*' have appeared in the series *The Changing Classroom*. The latest, *Developments in Mathematics Teaching*, is a concentrated survey of the changes in the last fifteen years at all levels from infant school to college of education. It is aimed (successfully) at any reader who has a general interest in education and wishes to know more about the truth behind the numerous statements on 'modern' mathematics which he is constantly hearing or reading. One does not need to be a mathematician to follow the argument.

After forty-five pages of general introductory matter, the book analyses half a dozen specific projects or developments (deliberately omitting SMP, apparently on the ground that it is so well established as to 'need no introduction'). It ends with a useful bibliography of 100 titles. The most significant omission is the lack of any reference to the late Harold Fletcher – probably because the series named after him has invaded the primary schools too recently for any assessment to be made in time. It is to be hoped that Mr Watson will publish one in due course, for he shows himself capable of shrewd and realistic assessments both of the problems of improving children's mathematical standards and of conducting curriculum development in such a way as to lead to a successful outcome in practice. He concludes that in some ways the changes have served only to highlight the problems and clarify the questions that must be asked. He reminds us of the contribution Nuffield maths made to starting teachers centres and of how various projects have brought teachers together into writing groups. That teachers *are* asking the questions and discussing the problems in these ways is a main cause of such improvement in the learning of mathematics as is taking place.

Much of the value of a book like this must lie in the author's selection of quotations from others. Among many important ones the prize goes to the following (from G. Polya) for its universal applicability throughout education: 'What the teacher says in the classroom is not unimportant, but what the students think is a thousand times more important'.

JOHN OUNSTED

Teaching local history

W. B. Stephens

Manchester University Press £5·95

History teachers' yearbook 1976

Peter Harris (Editor)

The Historical Association £1·80

History, according to a survey made in 1966 of the opinions of 10,000 school leavers, is 'a useless and boring subject', and they firmly placed it at the very bottom of the list. It is not difficult to see why. As Dr Stephens points out, 'history teachers have been trained largely in political history, and the school syllabus still often reflects this emphasis. Yet much political history, especially when concerned with constitutional issues and foreign policy, is treated in an abstract and theoretical fashion, intellectually and emotionally

remote, and inappropriate to the conceptual abilities of many children, and particularly of the average child below sixteen'.

Teaching Local History argues a strong case for including a large measure of local history into the school syllabus. Children certainly respond to it. They are often keenly interested in the history of their own city, town or village, not only because such history gives them the opportunity to see how an area they are familiar with has changed through time, but because it seems to them in many ways to be more relevant than national history is to the lives they themselves lead. It also gives them a chance to be historians themselves, discovering, evaluating and assessing evidence in much the same way as professional historians do.

Teaching local history, then, ought to appeal to most history teachers. The trouble is, of course, that it is a discipline and it has a methodology, both of which demand a great deal of expertise on the part of the teacher. Again, although local history is a subject in its own right, in schools it is most often used to give national history and its concerns a local habitation and a name.

Dr Stephens, a senior lecturer in education at the University of Leeds, and the former deputy general editor of the Victoria County Histories, has written an invaluable guidebook for any teacher, experienced in local history or not, who is considering introducing it into the history syllabus. It is tempting, of course, to romanticize the past, and the practice of local history is all too apt to degenerate into a kind of woolly antiquarianism. Dr Stephens is aware of this danger. He stresses the proper and disciplined use of primary source materials, and he has a judicious chapter on the value of fieldwork and archaeology. He concentrates above all on projects that make use of source material likely to be accessible to schoolchildren – maps, newspapers, censuses, and other printed material – and he includes some examples of work in local history that pupils have actually done. His book can be warmly recommended to anyone thinking of teaching local history in schools, but history tutors in adult and further education will find it useful too.

The *History Teachers' Yearbook*, a new venture by the Historical Association, gathers together many items of information not commonly found in one place. It will be particularly useful for teachers of local history, but anyone looking for audio-visual material, details of history and archaeological associations, museum services, archive teaching units, and so on, will find the names and addresses here.

IAIN PATERSON

Aspects of educational technology Volume X: individualized learning

John Clarke and John Leedham

Association of Programmed Learning and Educational Technology £10·50 hardback

This is the tenth volume in the series *Aspects of Educational Technology* and is the published proceedings of the Association's 1976 Annual Conference whose theme was 'Individualized Learning'. Now in convenient book form, some forty papers are collected together covering a very wide range of topics appropriate to this theme. There are many papers dealing with Individualized Learning in various education and training subject fields, while others are concerned with evaluation, research and aspects of resource organization and management in a range of educational situations. It is a mine of information; a practical book that can take its place alongside its companion volumes as a most useful work of reference for teachers, trainers, advisers and administrators who are daily involved in the search for better methods of teaching and more effective learning.

M. EDMUNDSON

Short review

Deviance in classrooms

David H. Hargreaves, Stephen K. Hester and Frank J. Mellor

Routledge and Kegan Paul £2·25 paperback

Deviance in Classrooms was originally published in 1975 in hardback at £5·50. It now makes a welcome appearance in paperback and has become an Open University set book.

Additional books received

ALEXANDER (Lord), and GEORGE TAYLOR. County and voluntary schools (fifth edition). *Councils and Education Press, £4·95.*

BARNES, DOUGLAS, and FRANKIE TODD. Communication and learning in small groups. *Routledge & Kegan Paul, £2·50.*

BERG, LEILA. Reading and loving. *Routledge & Kegan Paul, £2·75 (£1·20 paperback).*

BERGQUIST, WILLIAM H., and WILLIAM A. SHOEMAKER (editors). A comprehensive approach to institutional development. New Directions for Higher Education: Volume 15. *Jossey-Bass, £3·00.*

BERNSTEIN, BASIL. Class, codes and control. Volume 1: Theoretical studies towards a sociology of language. *Routledge & Kegan Paul, £2·40.*

BRUXNER, MERVYN. The value of music. *Bedford Square Press for the National Council of Social Service. £1·00 (£1·15 by post).*

BURROWS, JOHN. University adult education in London: a century of achievement. *University of London, £1·25.*

COURTAULD INSTITUTE OF ART. Archive 1: Cathedrals and monastic buildings in the British Isles. Part 1: Lincoln. *£25·00 per archive of four parts (subscription only).*

COX, C. B., and RHODES BOYSON (editors). Black Paper 1977. *Temple Smith, £1·65.*

CUATRECASAS, P., and M. F. GREAVES (editors). Receptors and recognition: Volume 2, Series A. *Chapman & Hall, £10·00 (£6·00 paperback).*

DALE, ROGER, GEOFF ESLAND, and MADELEINE MACDONALD (editors). Schooling and capitalism: a sociological reader. *Routledge & Kegan Paul, £3·73 (£1·90 paperback).*

DUNN, JUDY. Distress and comfort. *Fontana/Open Books, £3·50 (£1·00 paperback).*

DZIUBA, VICTORIA, and WILLIAM MEARDY. Enhancing trustee effectiveness. New Directions for Community Colleges: Volume 15. *Josey-Bass, £3·00.*

EUROPEAN CULTURAL FOUNDATION INSTITUTE OF EDUCATION. Between school and work. *European Cultural Foundation* (price not given).

FITCHETT, NORMAN. Chinese children in Derby. *National Association for Multi-Racial Education, £0·45.*

FITZHERBERT, KATRIN. Child care services and the teacher. *Temple Smith, £4·65.*

FLETCHER, COLIN (editor). Community education '77. *University of Nottingham Department of Adult Education, £0·95.*

GARVEY, CATHERINE. Play. *Fontana/Open Books, £3·50 (£1·00 paperback).*

GARVIE, EDIE. Breakthrough to fluency: English as a second language for young children. *Blackwell, £3·50 (£1·85 paperback).*

GOLLATTSCHECK, JAMES F. *et al.* College leadership for community renewal. *Jossey-Bass, £8·00.*

HAMMERSLEY, MARTYN and PETER WOODS (editors). The process of schooling: a sociological reader. *Routledge & Kegan Paul, £3·75 (£1·90 paperback).*

HARMAN, DAVID (editor). Expanding recurrent and non-formal education. New Directions for Higher Education: Volume 14. *Jossey-Bass, £3·00.*

HEYWOOD, JOHN. Assessment in higher education. *Wiley, £10·00.*

HOFFMAN, MARY. Reading, writing and relevance. *Hodder & Stoughton, £1·35.*

HOLT, JOHN. Instead of education. *Penguin, £0·80.*

HOWARTH, TONY (editor). The Times Educational Supplement guide to careers in education, 1977–78. *Nelson £2·95.*

JAMIESON, MONIKA MALCOLM PARLETT, and KEITH POCKLINGTON. Toward integration: a study of blind and partially sighted children in ordinary schools. *NFER, £6·25.*

KOHL, HERBERT R. Writing, maths and games in the open classroom. *Methuen, £4·00 (£2·35 paperback).*

LAW, BILL, and A. G. WATTS. Schools, careers and community. *Church Information Office, £1·60.*

LEE, GEORGE W. Sex education and the mentally retarded. *National Society for Mentally Handicapped Children, £0·50.*

LIVERPOOL EDUCATION COMMITTEE. Meeting their needs: Report and recommendations of a working party examining the educational needs of and provision for the children and Liverpool-born descendants of immigrants. *Liverpool Education Committee, free.*

MACBEATH, JOHN E. C. (editor). A question of schooling. *Hodder & Stoughton, £4·75 (£2·25 paperback).*

MACINTOSH, H. G. Assessing attainment in the classroom. *Hodder & Stoughton, £0·80.*

MACINTOSH, H. G., and D. E. HALE. Assessment and the secondary school teacher. *Routledge & Kegan Paul, £3·50 (£1·75 paperback).*

MACFARLANE, AIDAN, The psychology of childbirth. *Fontana/Open Books, £3·50 (£1·00 paperback).*

MACKINNON, KENNETH. Language, education and social processes in a Gaelic community. *Routledge & Kegan Paul, £4·75.*

MIND (NATIONAL ASSOCIATION FOR MENTAL HEALTH). Evidence of the Royal Commission on the NHS with regard to services for mentally handicapped people. *MIND, £1·00.*

MOORE, T. W. Educational theory: an introduction. *Routledge & Kegan Paul, £1·25.*

NATIONAL FOUNDATION FOR EDUCATIONAL RESEARCH IN ENGLAND AND WALES. Register of educational research in the United Kingdom, 1973–76. *NFER, £12·00.*

O'TOOLE, JOHN. Theatre in education. *Hodder & Stoughton, £4·95 (£2·40 paperback).*

PIAGET, JEAN. The origin of intelligence in the child, *Penguin, £1·95.*

PIAGET, JEAN. The moral judgement of the child. *Penguin, £1·95.*

PRIESTLEY, BARBARA (compiler). British qualifications (seventh edition). *Kogan Page, £9·00.*

ROGERSON, A. Modern mathematics in the science lesson. *Cambridge, £0·60.*

ROOT, BETTY, and SUE BROWNHILL. Starting point: Books for the illiterate adult and older reluctant reader. *National Book League, £0·45 for members, £0·60 for non-members.*

SAVILLE PETER, and STEVE BLINKHORN. Undergraduate personality by factored scales. *NFER, £6·50.*

SCHAFFER, RUDOLPH. Mothering. *Fontana/Open Books, £3·50 (£1·00 paperback).*

SMART, JOHN C., and JAMES R. MONTGOMERY (editors). Examining departmental management. New Directions for Institutional Research: Volume 10. *Jossey-Bass, £3·00.*

TUDOR-DAVIES, E. R. Mental handicap: A–Z – Your questions answered. *National Society for Mentally Handicapped Children £0·10.*

VERMILYE, DYCKMAN W. (editor). Individualizing the system: Current issues in higher education, 1976. *Jossey-Bass, £8·65.*

ZIMET, SARA GOODMAN. Print and prejudice. *Hodder & Stoughton, £1·45.*

Printed in Scotland by Her Majesty's Stationery Office at HMSO Press, Edinburgh
Dd 585867 K60 7/77 (14426)

© *Crown Copyright 1977*

ISBN 0 11 724701 4
ISSN 0041—2392